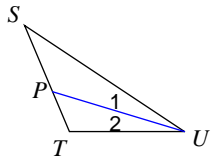


Assignment

Date _____ Period _____

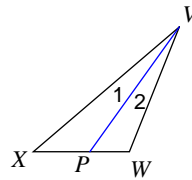
Each figure shows a triangle with one of its angle bisectors.

- 1) $m\angle 2 = 18x - 1$ and $m\angle SUT = 34x$.
Find x .



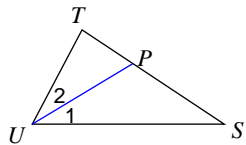
- A) 5 B) 3
C) 1 D) 6

- 2) $m\angle 2 = 3x + 2$ and $m\angle 1 = 4x - 2$.
Find x .



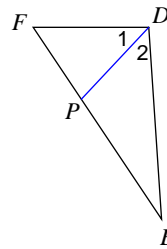
- A) 10 B) 6
C) 4 D) 8

- 3) Find x if $m\angle 2 = -1 + 16x$ and $m\angle 1 = 14x + 3$.



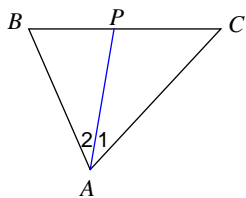
- A) 5 B) 4
C) 2 D) 8

- 4) Find x if $m\angle 1 = 6x + 5$ and $m\angle 2 = 5x + 12$.



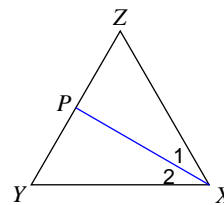
- A) 9 B) 7
C) 8 D) 4

- 5) Find x if $m\angle 2 = 12x - 3$ and $m\angle CAB = 23x - 3$.



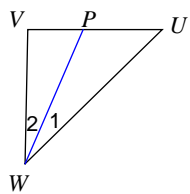
- A) 6 B) 2
C) 3 D) 9

- 6) $m\angle 2 = 4x + 2$ and $m\angle ZXY = 7x + 11$.
Find x .



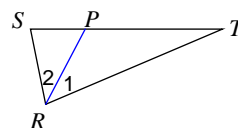
- A) 7 B) 9
C) 2 D) 4

- 7) Find x if $m\angle 2 = 3x + 7$ and $m\angle UWV = 7x + 9$.



- A) 9 B) 1
C) 5 D) 3

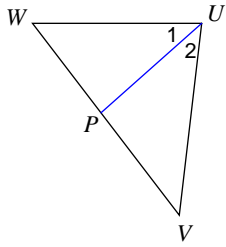
- 8) $m\angle 2 = 3x + 15$ and $m\angle TRS = 9x + 6$.
Find x .



- A) 5 B) 10
C) 8 D) 6

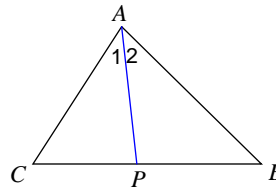


- 9) Find x if $m\angle 2 = 9x + 5$ and $m\angle 1 = 11x - 3$.



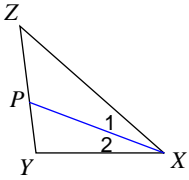
- A) 4 B) 6
C) 3 D) 5

- 10) Find x if $m\angle 2 = 4x + 11$ and $m\angle 1 = 5x + 4$.



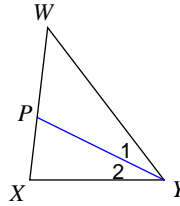
- A) 5 B) 8
C) 7 D) 2

- 11) $m\angle 2 = x + 10$ and $m\angle 1 = 2x$.
Find x .



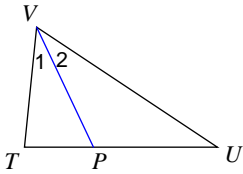
- A) 6 B) 10
C) 9 D) 2

- 12) $m\angle 1 = 27x - 1$ and $m\angle 2 = 1 + 25x$.
Find x .



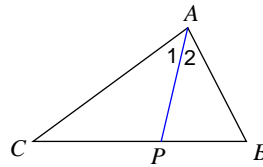
- A) 8 B) 1
C) 3 D) 4

- 13) Find x if $m\angle 1 = 16x - 1$ and $m\angle TVU = 30x + 2$.



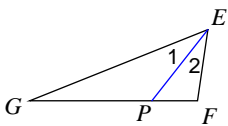
- A) 2 B) 3
C) 8 D) 10

- 14) $m\angle 2 = -2 + 7x$ and $m\angle CAB = 12x + 8$.
Find x .



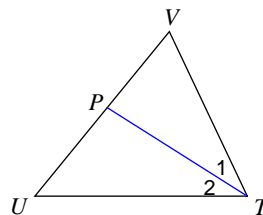
- A) 5 B) 10
C) 6 D) 1

- 15) Find x if $m\angle 2 = 8x - 2$ and $m\angle 1 = 6x + 6$.



- A) 6 B) 8
C) 4 D) 7

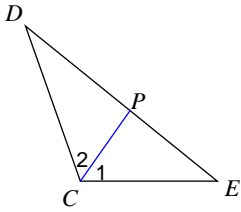
- 16) Find x if $m\angle 1 = 10x + 2$ and $m\angle 2 = -1 + 11x$.



- A) 8 B) 2
C) 3 D) 5

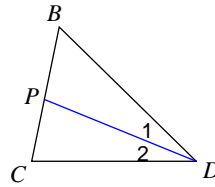


- 17) $m\angle 1 = 12x + 6$ and $m\angle ECD = 27x$.
Find x .



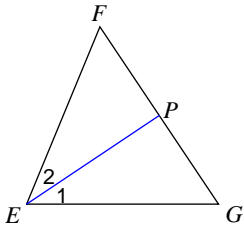
- A) 2 B) 3
C) 6 D) 4

- 18) $m\angle 2 = 21x + 1$ and $m\angle 1 = 22x$.
Find x .



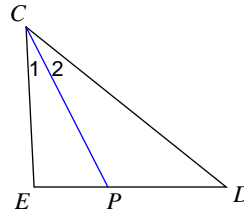
- A) 1 B) 8
C) 7 D) 5

- 19) $m\angle 1 = 2x + 13$ and $m\angle GEF = 6x + 6$.
Find x .



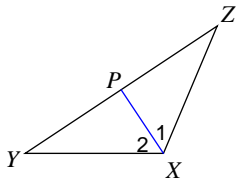
- A) 7 B) 2
C) 6 D) 10

- 20) $m\angle 1 = 4x - 8$ and $m\angle 2 = 2x + 8$.
Find x .



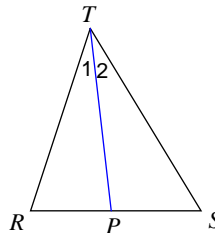
- A) 3 B) 1
C) 8 D) 4

- 21) $m\angle 1 = 7x - 7$ and $m\angle ZXY = 11x + 13$.
Find x .



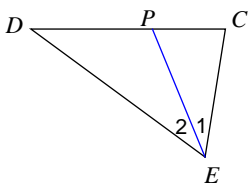
- A) 7 B) 4
C) 9 D) 2

- 22) Find x if $m\angle 1 = x + 14$ and $m\angle 2 = 2x + 4$.



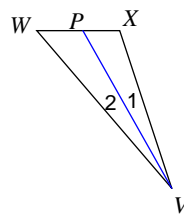
- A) 2 B) 5
C) 4 D) 10

- 23) $m\angle 1 = 4x + 7$ and $m\angle 2 = 6x - 5$.
Find x .



- A) 6 B) 4
C) 3 D) 8

- 24) Find x if $m\angle 2 = x + 4$ and $m\angle 1 = 2x - 3$.



- A) 10 B) 1
C) 7 D) 5



Answers to Assignment (ID: 1)

- 1) C
- 5) C
- 9) A
- 13) A
- 17) D
- 21) C

- 2) C
- 6) A
- 10) C
- 14) C
- 18) A
- 22) D

- 3) C
- 7) C
- 11) B
- 15) C
- 19) D
- 23) A

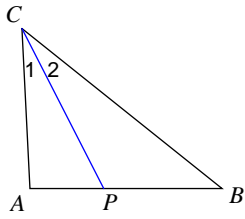
- 4) B
- 8) C
- 12) B
- 16) C
- 20) C
- 24) C



Assignment

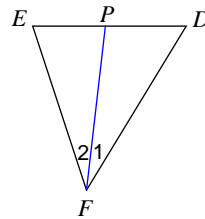
Each figure shows a triangle with one of its angle bisectors.

- 1) $m\angle 1 = 24x$ and $m\angle ACB = 47x + 1$.
Find x .



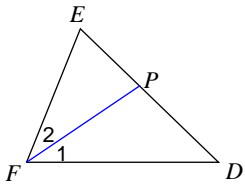
- A) 4 B) 2
C) 3 D) 1

- 2) Find x if $m\angle I = 7x - 4$ and $m\angle DFE = 11x + 4$.



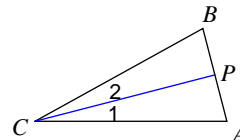
- A) 6 B) 8
C) 4 D) 7

- 3) Find x if $m\angle I = 5x - 6$ and $m\angle 2 = 4x + 2$.



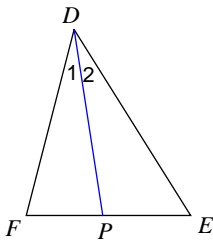
- A) 3 B) 8
C) 1 D) 5

- 4) $m\angle I = 2x - 6$ and $m\angle ACB = 3x - 2$.
Find x .



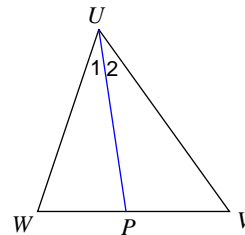
- A) 10 B) 3
C) 1 D) 5

- 5) Find x if $m\angle 2 = 5x - 2$ and $m\angle I = 3x + 8$.



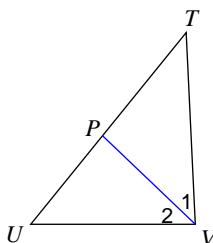
- A) 5 B) 8
C) 4 D) 6

- 6) Find x if $m\angle I = 4x + 3$ and $m\angle WUV = 9x$.



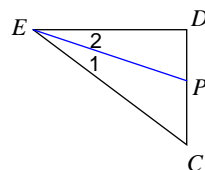
- A) 5 B) 10
C) 7 D) 6

- 7) $m\angle 2 = 44x - 1$ and $m\angle I = 42x + 1$.
Find x .



- A) 1 B) 10

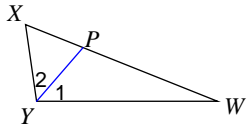
- 8) Find x if $m\angle 2 = 6x$ and $m\angle I = 7x - 3$.



- A) 10 B) 1
C) 6 D) 3

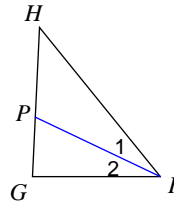


- 9) Find x if $m\angle 2 = 6x - 5$ and $m\angle WYX = -1 + 11x$.



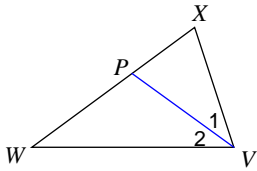
- A) 9 B) 8
C) 3 D) 4

- 10) Find x if $m\angle 2 = 7x + 4$ and $m\angle HFG = 16x + 2$.



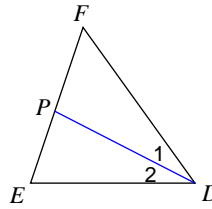
- A) 4 B) 8
C) 7 D) 3

- 11) Find x if $m\angle 2 = 37x - 1$ and $m\angle XVW = 72x$.



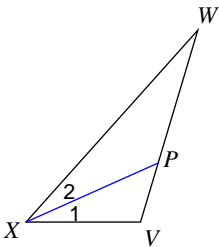
- A) 9 B) 1
C) 2 D) 7

- 12) Find x if $m\angle 2 = 3x + 3$ and $m\angle I = 4x - 5$.



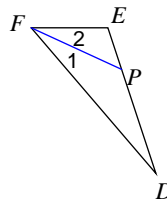
- A) 2 B) 3
C) 7 D) 8

- 13) Find x if $m\angle 2 = 4x + 4$ and $m\angle I = 5x - 1$.



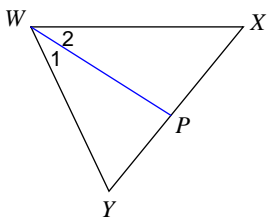
- A) 3 B) 5
C) 4 D) 7

- 14) Find x if $m\angle 2 = 12x$ and $m\angle DFE = 23x + 2$.



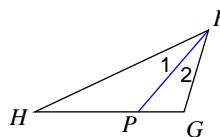
- A) 2 B) 9
C) 3 D) 1

- 15) $m\angle I = 31x + 1$ and $m\angle YWX = -1 + 65x$.
Find x .



- A) 8 B) 2
C) 7 D) 1

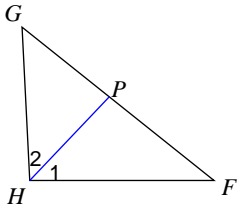
- 16) $m\angle I = 5x - 6$ and $m\angle 2 = 3x + 6$.
Find x .



- A) 10 B) 3
C) 6 D) 1

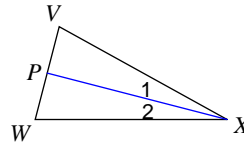


- 17) Find x if $m\angle 1 = 10x + 6$ and $m\angle 2 = 11x + 2$.



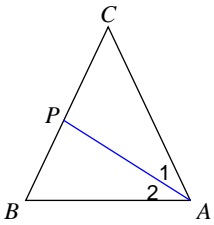
- A) 5 B) 10
C) 4 D) 3

- 18) $m\angle 2 = -2 + 4x$ and $m\angle 1 = 3x + 2$. Find x .



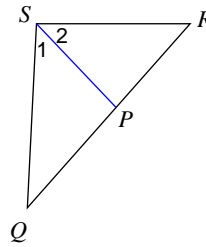
- A) 1 B) 7
C) 6 D) 4

- 19) Find x if $m\angle 1 = 32x$ and $m\angle 2 = 1 + 31x$.



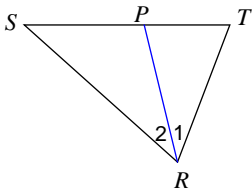
- A) 8 B) 1
C) 10 D) 2

- 20) $m\angle 2 = 15x + 1$ and $m\angle 1 = 14x + 4$. Find x .



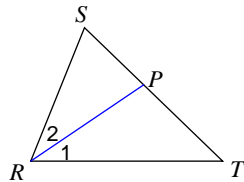
- A) 5 B) 3
C) 8 D) 6

- 21) Find x if $m\angle 1 = 7x - 1$ and $m\angle 2 = 5x + 9$.



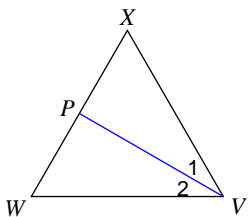
- A) 2 B) 5
C) 3 D) 4

- 22) Find x if $m\angle 2 = 2x + 16$ and $m\angle 1 = 3x + 7$.



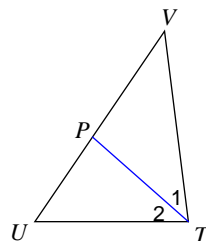
- A) 7 B) 8
C) 9 D) 3

- 23) $m\angle 2 = 9 + 3x$ and $m\angle XVW = 9x - 3$. Find x .



- A) 4 B) 7
C) 5 D) 1

- 24) Find x if $m\angle 2 = 11x - 3$ and $m\angle 1 = 10x + 1$.



- A) 4 B) 8
C) 9 D) 6



Answers to Assignment (ID: 2)

1) D
5) A
9) A
13) B
17) C
21) B

2) C
6) D
10) D
14) A
18) D
22) C

3) B
7) A
11) B
15) D
19) B
23) B

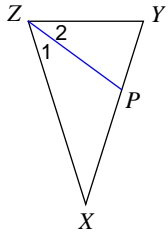
4) A
8) D
12) D
16) C
20) B
24) A



Assignment

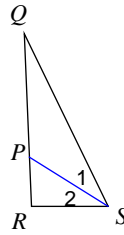
Each figure shows a triangle with one of its angle bisectors.

- 1) $m\angle 1 = 18x$ and $m\angle 2 = 17x + 2$.
Find x .



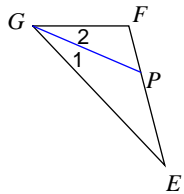
- A) 9 B) 2
C) 6 D) 1

- 2) $m\angle 2 = 3x + 8$ and $m\angle 1 = 4x$.
Find x .



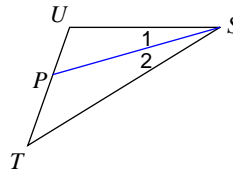
- A) 4 B) 9
C) 2 D) 8

- 3) Find x if $m\angle 1 = x + 15$ and $m\angle EGF = 5x + 6$.



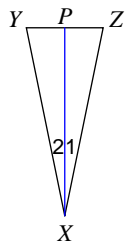
- A) 7 B) 8
C) 3 D) 10

- 4) $m\angle 1 = 16x$ and $m\angle 2 = -1 + 17x$.
Find x .



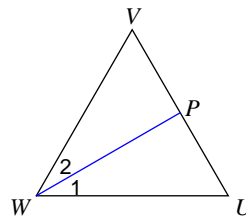
- A) 9 B) 7
C) 1 D) 8

- 5) $m\angle 1 = 3x + 2$ and $m\angle 2 = 4x - 1$.
Find x .



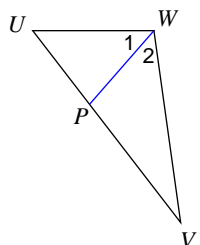
- A) 3 B) 8
C) 7 D) 4

- 6) $m\angle 2 = 3x + 9$ and $m\angle UWV = 7x + 11$.
Find x .



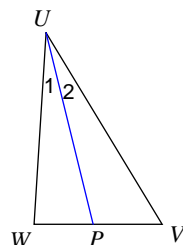
- A) 7 B) 8
C) 2 D) 5

- 7) $m\angle 1 = 6x + 7$ and $m\angle 2 = 8x - 7$.
Find x .



- A) 8 B) 2

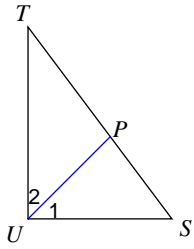
- 8) Find x if $m\angle 2 = 2x + 3$ and $m\angle 1 = 3x - 4$.



- A) 3 B) 10
C) 9 D) 7

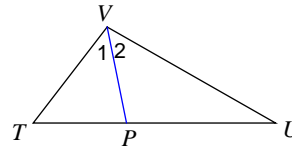


- 9) $m\angle I = 14x + 3$ and $m\angle SUT = 30x$.
Find x .



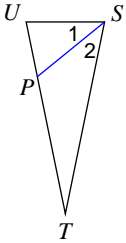
- A) 10 B) 7
C) 6 D) 3

- 10) Find x if $m\angle 2 = 4x + 9$ and
 $m\angle I = 5x - 1$.



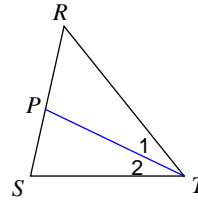
- A) 8 B) 10
C) 1 D) 4

- 11) Find x if $m\angle I = 5x - 6$ and
 $m\angle UST = 7x + 15$.



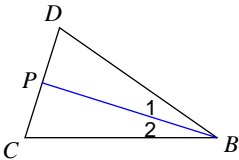
- A) 7 B) 9
C) 8 D) 5

- 12) $m\angle 2 = 3x + 1$ and $m\angle I = 2x + 9$.
Find x .



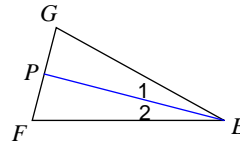
- A) 10 B) 8
C) 4 D) 6

- 13) $m\angle I = 3x - 4$ and $m\angle DBC = -1 + 5x$.
Find x .



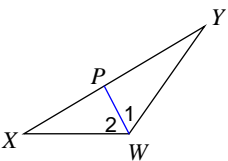
- A) 2 B) 1
C) 7 D) 10

- 14) $m\angle I = 2x - 4$ and $m\angle 2 = 5 + x$.
Find x .



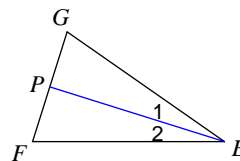
- A) 9 B) 4
C) 2 D) 3

- 15) Find x if $m\angle I = 11x - 4$ and
 $m\angle YWX = 21x - 2$.



- A) 4 B) 9
C) 5 D) 6

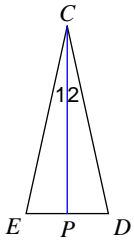
- 16) Find x if $m\angle 2 = 3x - 7$ and
 $m\angle I = 2x + 1$.



- A) 5 B) 10
C) 8 D) 1

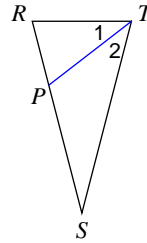


- 17) $m\angle 2 = 2x - 4$ and $m\angle 1 = x + 4$.
Find x .



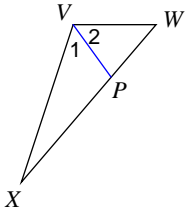
- A) 9 B) 8
C) 4 D) 7

- 18) Find x if $m\angle 1 = 18x + 2$ and $m\angle RTS = 38x$.



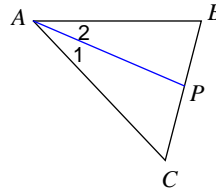
- A) 2 B) 6
C) 5 D) 3

- 19) Find x if $m\angle 1 = 13x + 2$ and $m\angle 2 = 14x - 2$.



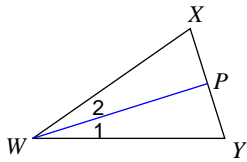
- A) 1 B) 3
C) 4 D) 6

- 20) $m\angle 2 = 7x + 2$ and $m\angle 1 = 8x - 1$.
Find x .



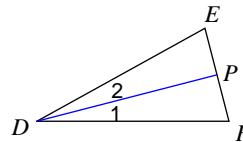
- A) 3 B) 10
C) 1 D) 4

- 21) $m\angle 1 = 2x + 7$ and $m\angle 2 = 4x - 3$.
Find x .



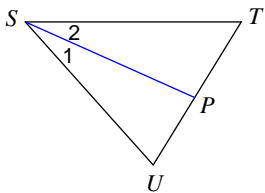
- A) 5 B) 2
C) 10 D) 1

- 22) Find x if $m\angle 2 = x + 8$ and $m\angle FDE = 5x - 2$.



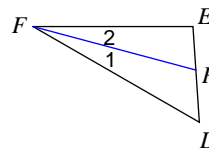
- A) 6 B) 9
C) 8 D) 1

- 23) Find x if $m\angle 2 = 5x + 4$ and $m\angle 1 = 6x$.



- A) 4 B) 5
C) 1 D) 6

- 24) Find x if $m\angle 2 = 2x - 3$ and $m\angle DFE = 2x + 12$.



- A) 5 B) 2
C) 9 D) 6



Answers to Assignment (ID: 3)

1) B
5) A
9) D
13) C
17) B
21) A

2) D
6) A
10) B
14) A
18) A
22) A

3) B
7) C
11) B
15) D
19) C
23) A

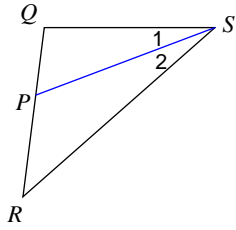
4) C
8) D
12) B
16) C
20) A
24) C



Assignment

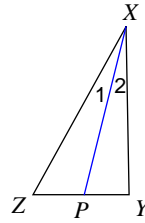
Each figure shows a triangle with one of its angle bisectors.

- 1) Find x if $m\angle 1 = 10x$ and $m\angle QSR = 19x + 2$.



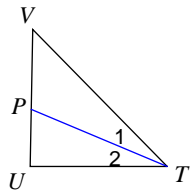
- A) 2 B) 9
C) 4 D) 5

- 2) $m\angle 2 = 2x - 5$ and $m\angle ZXY = 3x$. Find x .



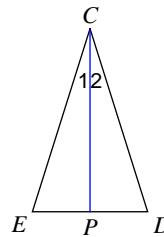
- A) 6 B) 10
C) 7 D) 4

- 3) Find x if $m\angle 1 = x + 13$ and $m\angle VTU = 3x + 16$.



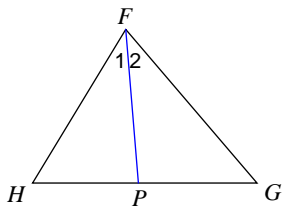
- A) 10 B) 3
C) 5 D) 2

- 4) $m\angle 1 = 16x + 1$ and $m\angle ECD = 33x + 1$. Find x .



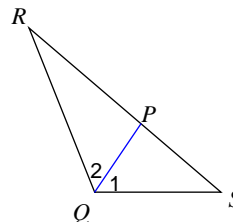
- A) 2 B) 1
C) 4 D) 10

- 5) Find x if $m\angle 2 = 12x$ and $m\angle 1 = 13x - 3$.



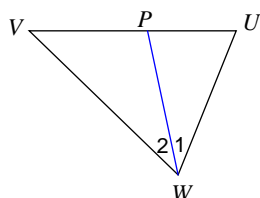
- A) 8 B) 6
C) 7 D) 3

- 6) Find x if $m\angle 1 = 12x - 4$ and $m\angle 2 = 11x + 1$.



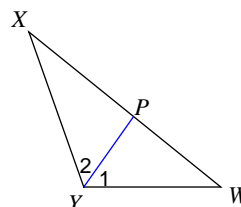
- A) 5 B) 7
C) 9 D) 1

- 7) Find x if $m\angle 2 = 3x + 7$ and $m\angle 1 = 4x - 2$.



- A) 6 B) 7

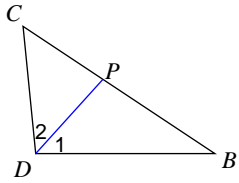
- 8) $m\angle 2 = 9x + 9$ and $m\angle 1 = 11x - 1$. Find x .



- A) 6 B) 5
C) 8 D) 3

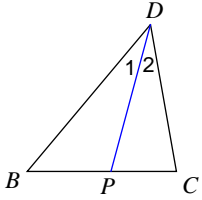


- 9) $m\angle 2 = 12x$ and $m\angle 1 = 13x - 4$.
Find x .



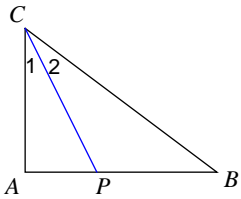
- A) 1 B) 8
C) 4 D) 2

- 11) $m\angle 2 = 6x - 5$ and $m\angle 1 = 5x$.
Find x .



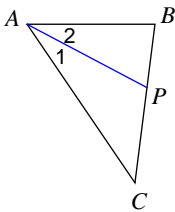
- A) 2 B) 5
C) 8 D) 4

- 13) $m\angle 2 = 2x + 12$ and $m\angle ACB = 6x + 10$.
Find x .



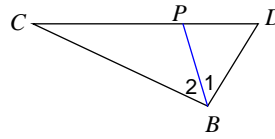
- A) 6 B) 4
C) 5 D) 7

- 15) $m\angle 1 = 6x + 4$ and $m\angle 2 = 8x - 4$.
Find x .



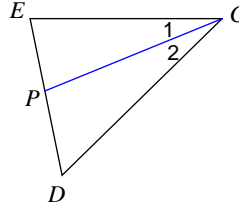
- A) 3 B) 2
C) 9 D) 4

- 10) $m\angle 1 = 6x - 6$ and $m\angle DBC = 11x - 3$.
Find x .



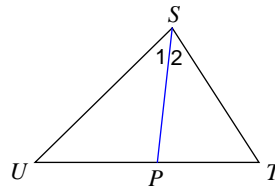
- A) 3 B) 5
C) 2 D) 9

- 12) $m\angle 1 = 4x - 2$ and $m\angle 2 = 2x + 10$.
Find x .



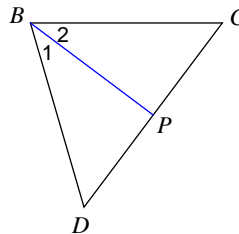
- A) 6 B) 4
C) 5 D) 1

- 14) Find x if $m\angle 1 = 12x + 3$ and $m\angle 2 = 13x$.



- A) 3 B) 1
C) 9 D) 4

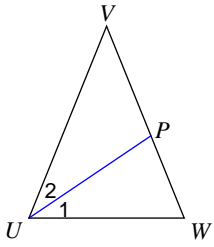
- 16) $m\angle 1 = 4x + 1$ and $m\angle DBC = 9x - 7$.
Find x .



- A) 9 B) 2
C) 7 D) 8

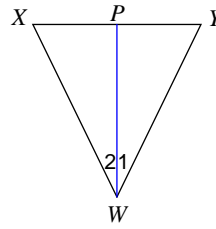


- 17) Find x if $m\angle 2 = 12x - 2$ and $m\angle WUV = 22x + 2$.



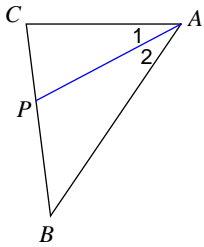
- A) 6 B) 8
C) 3 D) 9

- 18) $m\angle 1 = x + 16$ and $m\angle YWX = 5x + 2$. Find x .



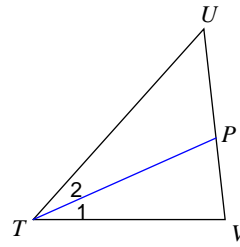
- A) 1 B) 10
C) 9 D) 5

- 19) Find x if $m\angle 1 = 5x - 2$ and $m\angle 2 = 3x + 10$.



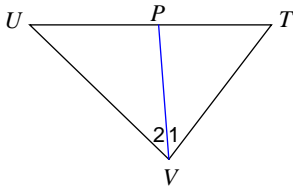
- A) 6 B) 4
C) 8 D) 10

- 20) Find x if $m\angle 1 = 4x + 4$ and $m\angle 2 = 5x - 1$.



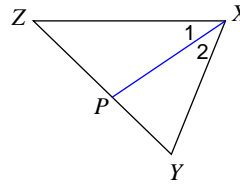
- A) 5 B) 9
C) 1 D) 7

- 21) Find x if $m\angle 1 = 5x - 4$ and $m\angle 2 = 3x + 14$.



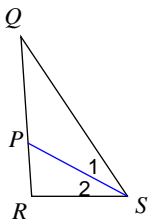
- A) 9 B) 8
C) 7 D) 10

- 22) Find x if $m\angle 2 = 18x - 2$ and $m\angle 1 = 16x + 2$.



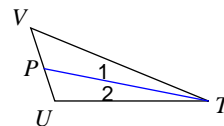
- A) 3 B) 7
C) 5 D) 2

- 23) $m\angle 1 = 28x$ and $m\angle QSR = 55x + 1$. Find x .



- A) 1 B) 8
C) 10 D) 9

- 24) $m\angle 1 = x + 2$ and $m\angle VTU = x + 13$. Find x .



- A) 1 B) 8
C) 2 D) 9



Answers to Assignment (ID: 4)

1) A
5) D
9) C
13) D
17) C
21) A

2) B
6) A
10) D
14) A
18) B
22) D

3) A
7) D
11) B
15) D
19) A
23) A

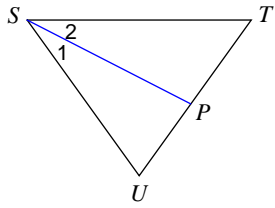
4) B
8) B
12) A
16) A
20) A
24) D



Assignment

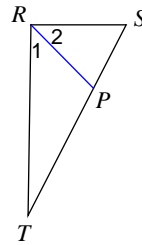
Each figure shows a triangle with one of its angle bisectors.

- 1) $m\angle 2 = 5x + 7$ and $m\angle UST = 12x + 6$.
Find x .



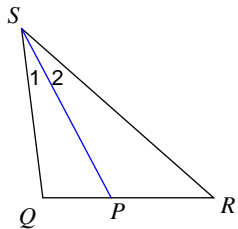
- A) 7 B) 1
C) 4 D) 10

- 2) Find x if $m\angle 2 = 8x - 3$ and $m\angle TRS = 14x + 6$.



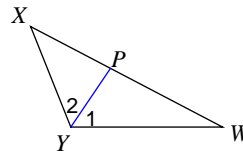
- A) 2 B) 6
C) 8 D) 5

- 3) $m\angle I = 2x + 4$ and $m\angle 2 = x + 12$.
Find x .



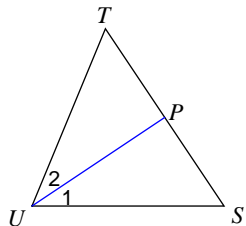
- A) 8 B) 9
C) 4 D) 5

- 4) $m\angle 2 = 55x + 1$ and $m\angle I = 57x - 1$.
Find x .



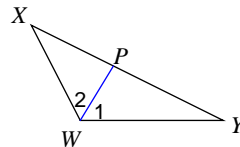
- A) 3 B) 1
C) 4 D) 6

- 5) $m\angle 2 = 5 + 4x$ and $m\angle I = 3x + 12$.
Find x .



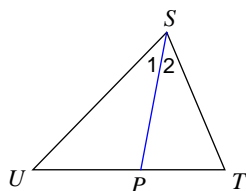
- A) 5 B) 7
C) 9 D) 4

- 6) $m\angle 2 = 9 + 7x$ and $m\angle I = 9x - 5$.
Find x .



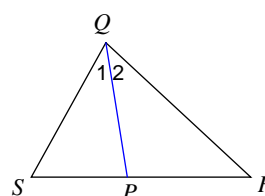
- A) 6 B) 9
C) 7 D) 1

- 7) Find x if $m\angle 2 = 15x + 3$ and $m\angle UST = 34x - 2$.



- A) 2 B) 9

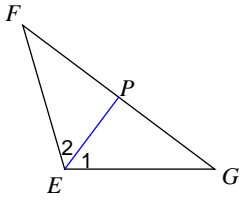
- 8) Find x if $m\angle I = 4x + 6$ and $m\angle 2 = 5x - 2$.



- A) 10 B) 8
C) 4 D) 9

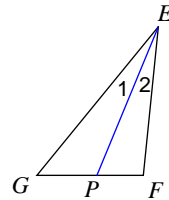


- 9) Find x if $m\angle 2 = 9x + 8$ and $m\angle GEF = 21x + 1$.



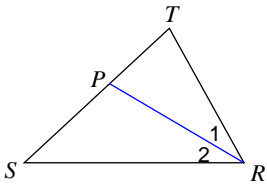
- A) 8 B) 6
C) 5 D) 4

- 10) Find x if $m\angle 1 = x + 10$ and $m\angle GEF = 3x + 13$.



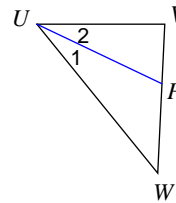
- A) 9 B) 4
C) 7 D) 1

- 11) $m\angle 1 = 3x + 3$ and $m\angle TRS = 7x - 3$.
Find x .



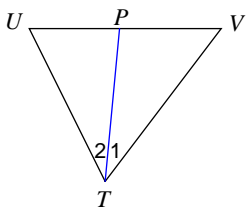
- A) 2 B) 1
C) 9 D) 8

- 12) $m\angle 2 = 8x + 1$ and $m\angle 1 = 7x + 4$.
Find x .



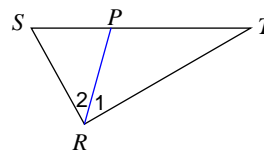
- A) 3 B) 8
C) 6 D) 4

- 13) Find x if $m\angle 2 = 5x - 3$ and $m\angle 1 = 3x + 11$.



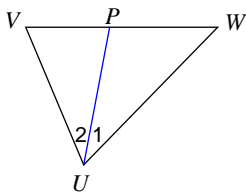
- A) 1 B) 10
C) 9 D) 7

- 14) $m\angle 1 = 11x$ and $m\angle 2 = 12x - 4$.
Find x .



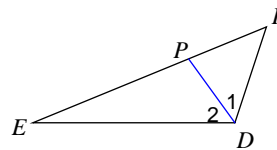
- A) 3 B) 4
C) 5 D) 2

- 15) Find x if $m\angle 1 = 3x + 12$ and $m\angle WUV = 9x + 3$.



- A) 9 B) 7
C) 2 D) 8

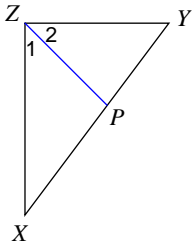
- 16) $m\angle 1 = 8x + 6$ and $m\angle FDE = 18x$.
Find x .



- A) 7 B) 8
C) 4 D) 6

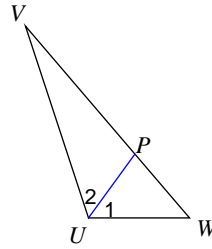


- 17) Find x if $m\angle 1 = 12x - 3$ and $m\angle 2 = 10x + 5$.



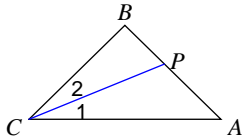
- A) 6 B) 5
C) 4 D) 1

- 18) $m\angle 2 = 9x$ and $m\angle 1 = 10x - 6$. Find x .



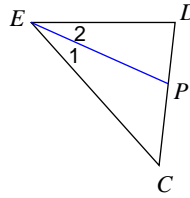
- A) 3 B) 7
C) 9 D) 6

- 19) $m\angle 2 = x + 13$ and $m\angle ACB = 4x + 8$. Find x .



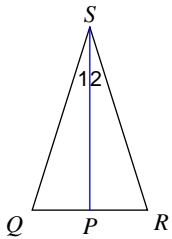
- A) 2 B) 5
C) 9 D) 7

- 20) Find x if $m\angle 2 = 7x + 3$ and $m\angle 1 = 9x - 3$.



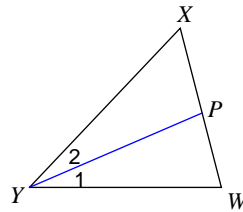
- A) 3 B) 2
C) 8 D) 6

- 21) $m\angle 1 = 5x + 2$ and $m\angle QSR = 11x + 1$. Find x .



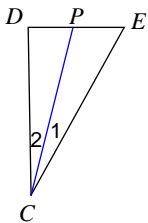
- A) 3 B) 1
C) 4 D) 7

- 22) Find x if $m\angle 1 = x + 14$ and $m\angle 2 = 2x + 5$.



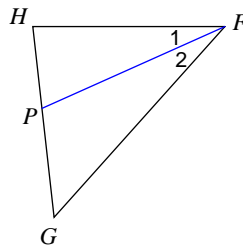
- A) 4 B) 9
C) 7 D) 5

- 23) $m\angle 1 = x + 8$ and $m\angle ECD = -5 + 5x$. Find x .



- A) 8 B) 7
C) 1 D) 6

- 24) Find x if $m\angle 1 = 7x + 3$ and $m\angle HFG = 15x + 3$.



- A) 2 B) 3
C) 9 D) 8



Answers to Assignment (ID: 5)

1) C
5) B
9) C
13) D
17) C
21) A

2) B
6) C
10) C
14) B
18) D
22) B

3) A
7) A
11) C
15) B
19) C
23) B

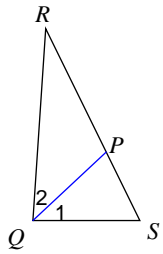
4) B
8) B
12) A
16) D
20) A
24) B



Assignment

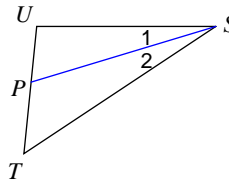
Each figure shows a triangle with one of its angle bisectors.

- 1) $m\angle 1 = 5x - 7$ and $m\angle SQR = 7x + 16$.
Find x .



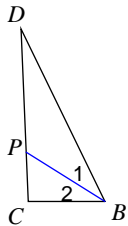
- A) 9 B) 10
C) 4 D) 3

- 2) $m\angle 1 = 3x - 1$ and $m\angle 2 = x + 11$.
Find x .



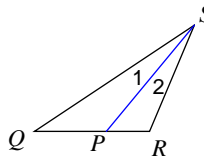
- A) 6 B) 5
C) 2 D) 10

- 3) Find x if $m\angle 1 = -8 + 4x$ and $m\angle 2 = 3x + 2$.



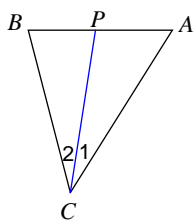
- A) 1 B) 10
C) 3 D) 2

- 4) Find x if $m\angle 1 = 7x + 3$ and $m\angle 2 = 8x + 1$.



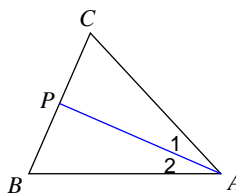
- A) 10 B) 8
C) 2 D) 5

- 5) Find x if $m\angle 1 = 23x$ and $m\angle 2 = 24x - 1$.



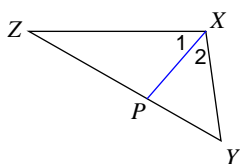
- A) 10 B) 5
C) 4 D) 1

- 6) $m\angle 1 = 2x + 11$ and $m\angle 2 = 4x - 1$.
Find x .



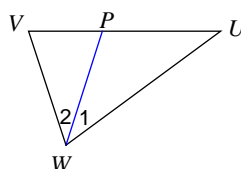
- A) 4 B) 3
C) 2 D) 6

- 7) Find x if $m\angle 1 = 49x$ and $m\angle 2 = 50x - 1$.



- A) 4 B) 2

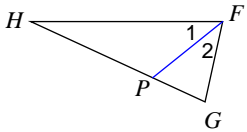
- 8) Find x if $m\angle 2 = 4x$ and $m\angle 1 = 3x + 9$.



- A) 3 B) 8
C) 5 D) 9

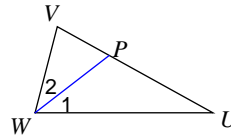


- 9) $m\angle 2 = 13x$ and $m\angle 1 = 14x - 3$.
Find x .



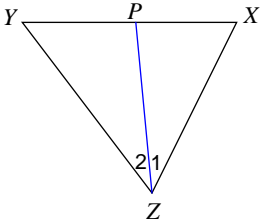
- A) 2 B) 10
C) 3 D) 9

- 10) $m\angle 2 = -7 + 5x$ and $m\angle 1 = 4x + 2$.
Find x .



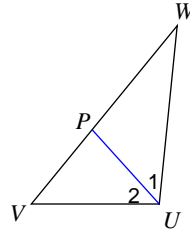
- A) 3 B) 7
C) 9 D) 6

- 11) Find x if $m\angle 1 = 3x + 11$ and
 $m\angle XZY = 8x + 8$.



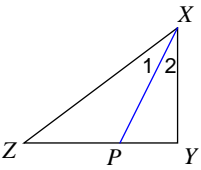
- A) 7 B) 5
C) 2 D) 8

- 12) Find x if $m\angle 2 = 11x + 4$ and
 $m\angle 1 = 13x - 4$.



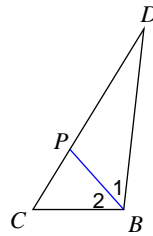
- A) 5 B) 2
C) 4 D) 7

- 13) Find x if $m\angle 1 = 2x + 6$ and
 $m\angle 2 = 3x - 4$.



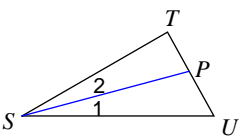
- A) 3 B) 5
C) 10 D) 9

- 14) Find x if $m\angle 1 = 10x - 2$ and
 $m\angle DBC = 18x + 6$.



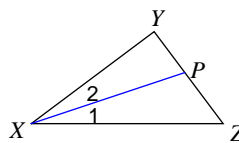
- A) 5 B) 3
C) 2 D) 10

- 15) Find x if $m\angle 2 = 3x$ and
 $m\angle 1 = 2x + 5$.



- A) 8 B) 3
C) 4 D) 5

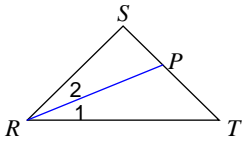
- 16) $m\angle 1 = x + 9$ and $m\angle 2 = 2x$.
Find x .



- A) 1 B) 9
C) 7 D) 8

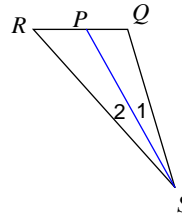


- 17) $m\angle I = 8x - 2$ and $m\angle TRS = 15x - 1$.
Find x .



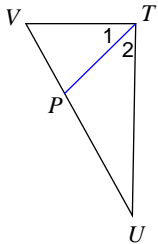
- A) 3 B) 10
C) 9 D) 5

- 18) $m\angle I = x + 5$ and $m\angle QSR = 3x + 3$.
Find x .



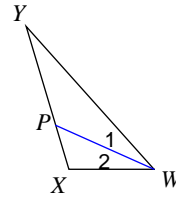
- A) 2 B) 8
C) 7 D) 6

- 19) $m\angle I = 15x - 1$ and $m\angle 2 = 14x + 2$.
Find x .



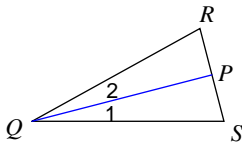
- A) 9 B) 6
C) 4 D) 3

- 20) $m\angle I = 5x - 1$ and $m\angle YWX = 8x + 8$.
Find x .



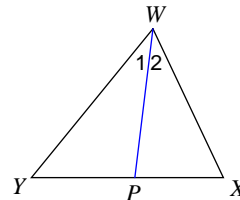
- A) 5 B) 9
C) 3 D) 7

- 21) $m\angle I = 2x - 2$ and $m\angle SQR = 2x + 12$.
Find x .



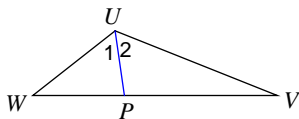
- A) 5 B) 2
C) 9 D) 8

- 22) $m\angle 2 = 5x + 2$ and $m\angle I = 4x + 8$.
Find x .



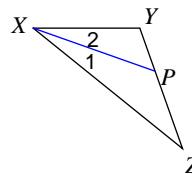
- A) 5 B) 10
C) 6 D) 7

- 23) Find x if $m\angle I = 9x + 6$ and $m\angle WUV = 20x$.



- A) 8 B) 1
C) 6 D) 7

- 24) Find x if $m\angle I = 9x + 1$ and $m\angle 2 = 10x - 1$.



- A) 8 B) 5
C) 2 D) 3



Answers to Assignment (ID: 6)

1) B
5) D
9) C
13) C
17) A
21) D

2) A
6) D
10) C
14) A
18) C
22) C

3) B
7) C
11) A
15) D
19) D
23) C

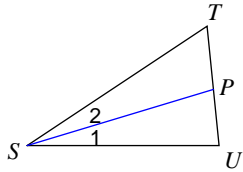
4) C
8) D
12) C
16) B
20) A
24) C



Assignment

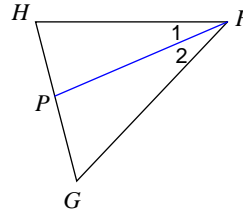
Each figure shows a triangle with one of its angle bisectors.

- 1) Find x if $m\angle 2 = x + 11$ and $m\angle UST = 5x + 4$.



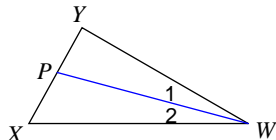
- A) 4 B) 2
C) 6 D) 8

- 2) Find x if $m\angle 2 = 8x - 1$ and $m\angle I = 7x + 2$.



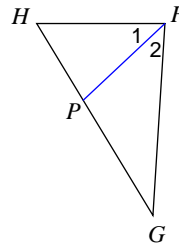
- A) 2 B) 3
C) 10 D) 8

- 3) $m\angle I = 4x - 1$ and $m\angle 2 = 2x + 7$. Find x .



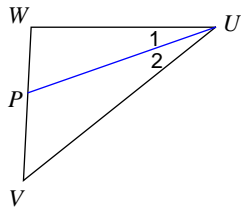
- A) 4 B) 6
C) 5 D) 7

- 4) Find x if $m\angle I = 8x + 3$ and $m\angle 2 = 9x - 2$.



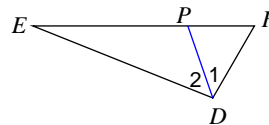
- A) 4 B) 8
C) 3 D) 5

- 5) $m\angle 2 = 5x - 1$ and $m\angle I = 4x + 3$. Find x .



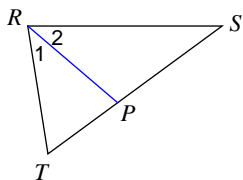
- A) 6 B) 3
C) 4 D) 2

- 6) Find x if $m\angle I = 13 + 4x$ and $m\angle FDE = 10x + 8$.



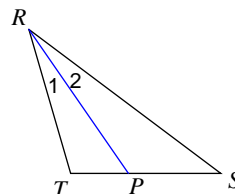
- A) 6 B) 7
C) 10 D) 9

- 7) $m\angle 2 = 4x + 12$ and $m\angle I = 6x - 2$. Find x .



- A) 3 B) 7
C) 8 D) 6

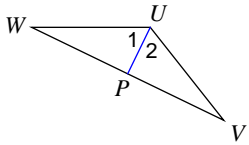
- 8) Find x if $m\angle I = 2x$ and $m\angle 2 = x + 9$.



- A) 7 B) 3
C) 4 D) 9

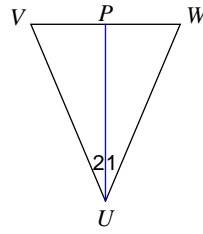


- 9) Find x if $m\angle 2 = 33x - 2$ and $m\angle 1 = 32x$.



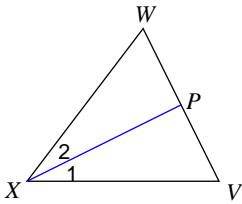
- A) 10 B) 5
C) 9 D) 2

- 10) $m\angle 2 = 2x + 5$ and $m\angle 1 = x + 14$.
Find x .



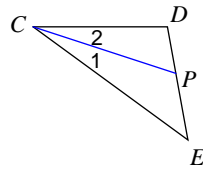
- A) 7 B) 8
C) 9 D) 6

- 11) Find x if $m\angle 2 = 2x + 10$ and $m\angle 1 = 3x + 2$.



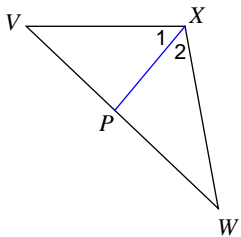
- A) 8 B) 1
C) 6 D) 10

- 12) Find x if $m\angle 1 = 2 + 2x$ and $m\angle 2 = 3x - 6$.



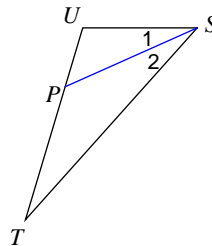
- A) 2 B) 8
C) 6 D) 9

- 13) $m\angle 2 = 26x - 2$ and $m\angle VXW = 49x + 2$.
Find x .



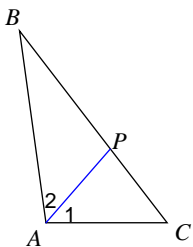
- A) 2 B) 5
C) 3 D) 9

- 14) $m\angle 1 = 3x$ and $m\angle UST = 7x - 8$.
Find x .



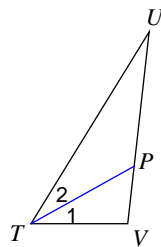
- A) 6 B) 3
C) 8 D) 4

- 15) Find x if $m\angle 2 = 11x + 5$ and $m\angle 1 = 12x + 1$.



- A) 10 B) 3
C) 4 D) 7

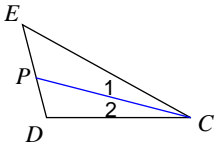
- 16) $m\angle 2 = 8x - 3$ and $m\angle 1 = 6x + 5$.
Find x .



- A) 8 B) 9
C) 5 D) 4

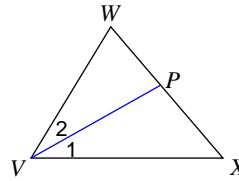


- 17) Find x if $m\angle 2 = x + 5$ and $m\angle ECD = 4x - 8$.



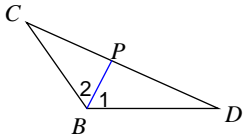
- A) 9 B) 3
C) 7 D) 10

- 18) Find x if $m\angle 1 = 9x + 2$ and $m\angle XVW = 19x + 1$.



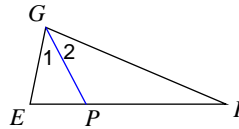
- A) 5 B) 3
C) 1 D) 6

- 19) Find x if $m\angle 2 = 7x - 8$ and $m\angle 1 = 6x + 2$.



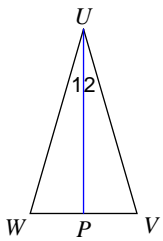
- A) 2 B) 10
C) 4 D) 9

- 20) Find x if $m\angle 2 = 5x + 4$ and $m\angle EGF = 11x + 1$.



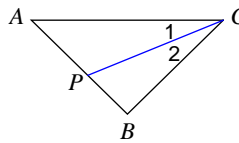
- A) 7 B) 5
C) 1 D) 2

- 21) Find x if $m\angle 1 = 4x - 4$ and $m\angle 2 = 3x + 1$.



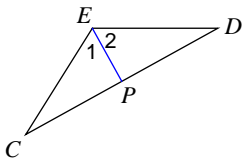
- A) 5 B) 3
C) 9 D) 7

- 22) $m\angle 1 = x + 14$ and $m\angle 2 = -2 + 3x$. Find x .



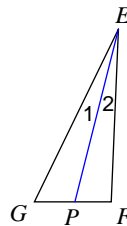
- A) 3 B) 4
C) 7 D) 8

- 23) Find x if $m\angle 1 = 8x - 3$ and $m\angle CED = 2 + 15x$.



- A) 9 B) 2
C) 7 D) 8

- 24) Find x if $m\angle 2 = 5x - 3$ and $m\angle 1 = 3x + 3$.



- A) 3 B) 8
C) 10 D) 1



Answers to Assignment (ID: 7)

1) C
5) C
9) D
13) A
17) A
21) A

2) B
6) D
10) C
14) C
18) B
22) D

3) A
7) B
11) A
15) C
19) B
23) D

4) D
8) D
12) B
16) D
20) A
24) A

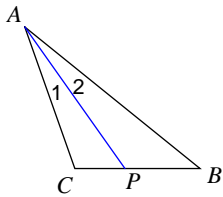


Assignment

Date _____ Period _____

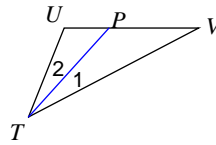
Each figure shows a triangle with one of its angle bisectors.

- 1) Find x if $m\angle 1 = -8 + 3x$ and $m\angle CAB = 4x$.



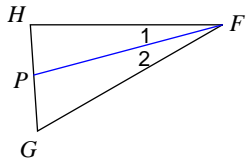
- A) 1 B) 6
C) 9 D) 8

- 2) Find x if $m\angle 2 = 2x + 8$ and $m\angle 1 = 4x - 4$.



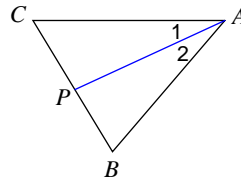
- A) 10 B) 4
C) 6 D) 1

- 3) $m\angle 2 = 4x - 1$ and $m\angle 1 = 3x + 3$. Find x .



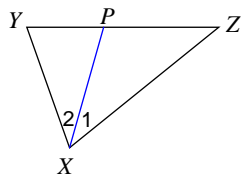
- A) 10 B) 7
C) 4 D) 5

- 4) $m\angle 1 = 6x$ and $m\angle CAB = 11x + 4$. Find x .



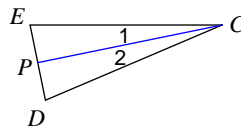
- A) 4 B) 9
C) 8 D) 2

- 5) Find x if $m\angle 2 = 4x - 1$ and $m\angle 1 = 2x + 17$.



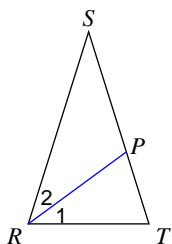
- A) 8 B) 3
C) 1 D) 9

- 6) $m\angle 1 = x + 6$ and $m\angle 2 = 2x + 1$. Find x .



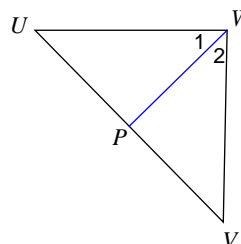
- A) 8 B) 4
C) 1 D) 5

- 7) Find x if $m\angle 1 = 8x - 4$ and $m\angle 2 = 7x + 1$.



- A) 5 B) 10
C) 3 D) 6

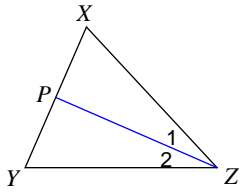
- 8) $m\angle 2 = 43x + 1$ and $m\angle 1 = 44x$. Find x .



- A) 1 B) 10
C) 4 D) 5

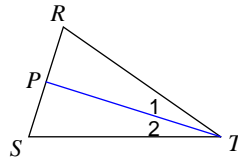


- 9) Find x if $m\angle 2 = 10x + 3$ and $m\angle XZY = 24x - 2$.



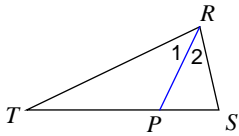
- A) 5 B) 8
C) 2 D) 10

- 10) Find x if $m\angle 1 = 6x - 1$ and $m\angle 2 = 5x + 2$.



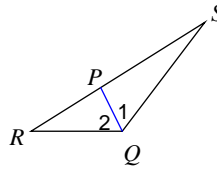
- A) 3 B) 2
C) 4 D) 5

- 11) $m\angle 1 = -2 + 8x$ and $m\angle TRS = 15x + 1$.
Find x .



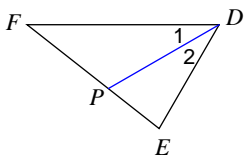
- A) 3 B) 7
C) 5 D) 6

- 12) $m\angle 1 = 1 + 62x$ and $m\angle 2 = 64x - 1$.
Find x .



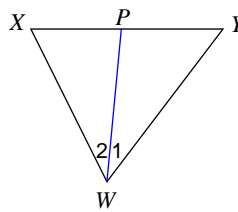
- A) 1 B) 6
C) 2 D) 8

- 13) $m\angle 1 = 4x - 10$ and $m\angle 2 = 10 + 2x$.
Find x .



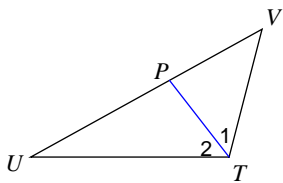
- A) 5 B) 3
C) 6 D) 10

- 14) Find x if $m\angle 1 = 4x - 8$ and $m\angle 2 = 2x + 12$.



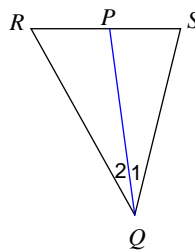
- A) 10 B) 3
C) 5 D) 8

- 15) Find x if $m\angle 2 = 7x + 3$ and $m\angle VTU = 15x - 1$.



- A) 10 B) 2
C) 7 D) 1

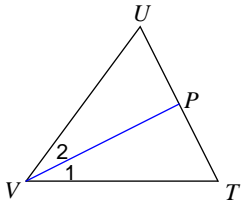
- 16) Find x if $m\angle 2 = x + 11$ and $m\angle SQR = 4x + 2$.



- A) 1 B) 2
C) 10 D) 8

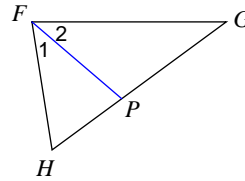


- 17) Find x if $m\angle 2 = 13x$ and $m\angle TVU = 25x + 2$.



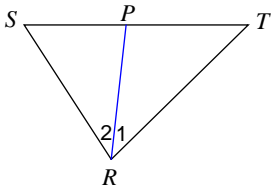
- A) 3 B) 2
C) 8 D) 7

- 18) Find x if $m\angle 1 = 6x - 8$ and $m\angle 2 = 4x + 8$.



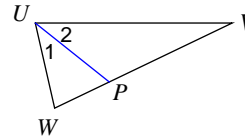
- A) 1 B) 2
C) 8 D) 4

- 19) Find x if $m\angle 1 = 20x - 1$ and $m\angle TRS = 38x + 2$.



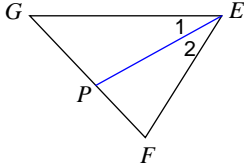
- A) 7 B) 4
C) 2 D) 9

- 20) $m\angle 1 = 6x + 2$ and $m\angle 2 = 7x - 4$. Find x .



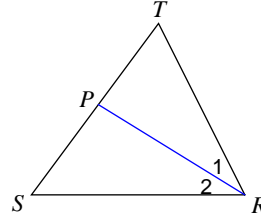
- A) 8 B) 10
C) 1 D) 6

- 21) $m\angle 1 = 5x - 1$ and $m\angle GEF = 9x + 4$. Find x .



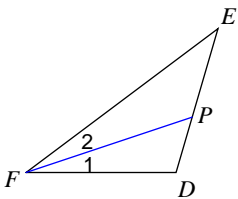
- A) 6 B) 8
C) 3 D) 4

- 22) $m\angle 2 = 5x - 4$ and $m\angle 1 = 4x + 3$. Find x .



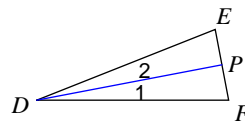
- A) 2 B) 10
C) 8 D) 7

- 23) $m\angle 2 = 17x + 1$ and $m\angle DFE = 37x - 1$. Find x .



- A) 5 B) 3
C) 1 D) 6

- 24) $m\angle 1 = x + 3$ and $m\angle 2 = 2x - 5$. Find x .



- A) 8 B) 2
C) 9 D) 10



Answers to Assignment (ID: 8)

1) D
5) D
9) C
13) D
17) B
21) A

2) C
6) D
10) A
14) A
18) C
22) D

3) C
7) A
11) C
15) C
19) C
23) C

4) A
8) A
12) A
16) C
20) D
24) A

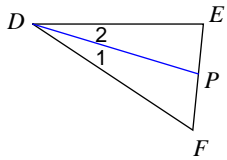


Assignment

Date _____ Period _____

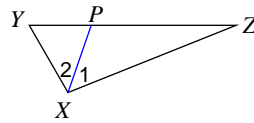
Each figure shows a triangle with one of its angle bisectors.

- 1) Find x if $m\angle I = x + 11$ and $m\angle 2 = 3x - 1$.



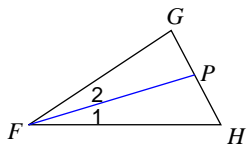
- A) 10 B) 6
C) 5 D) 9

- 2) $m\angle I = 8x + 9$ and $m\angle ZXY = 18x + 8$. Find x .



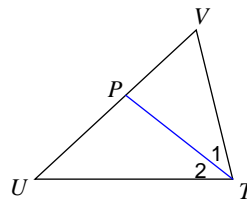
- A) 3 B) 4
C) 5 D) 6

- 3) $m\angle I = x + 7$ and $m\angle HFG = 4 + 3x$. Find x .



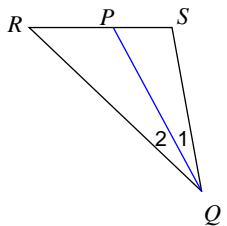
- A) 2 B) 10
C) 5 D) 6

- 4) Find x if $m\angle 2 = 8x + 6$ and $m\angle VTU = 20x - 4$.



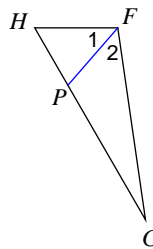
- A) 1 B) 4
C) 5 D) 8

- 5) $m\angle 2 = 3x - 9$ and $m\angle I = x + 9$. Find x .



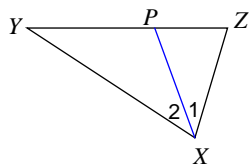
- A) 5 B) 9
C) 8 D) 10

- 6) Find x if $m\angle I = 25x - 1$ and $m\angle HFG = 2 + 48x$.



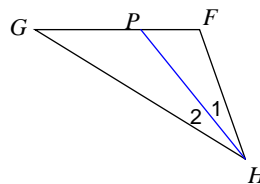
- A) 2 B) 8
C) 6 D) 4

- 7) $m\angle I = 10x - 4$ and $m\angle ZXY = 18x$. Find x .



- A) 3 B) 8
C) 9 D) 4

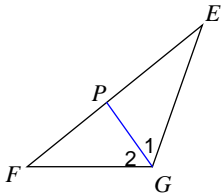
- 8) Find x if $m\angle I = x + 11$ and $m\angle FHG = 4x + 6$.



- A) 8 B) 7
C) 9 D) 2

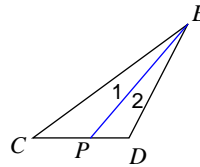


- 9) Find x if $m\angle 2 = 5x + 4$ and $m\angle EGF = 9x + 18$.



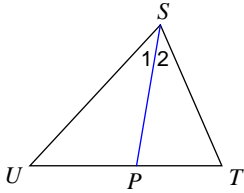
- A) 2 B) 1
C) 3 D) 10

- 10) Find x if $m\angle 1 = 2x - 7$ and $m\angle CED = 16 + x$.



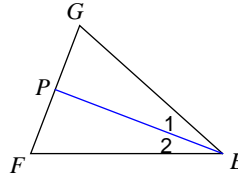
- A) 5 B) 10
C) 1 D) 3

- 11) $m\angle 2 = 33x$ and $m\angle 1 = 32x + 1$.
Find x .



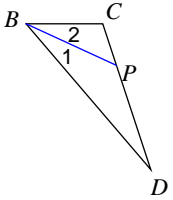
- A) 6 B) 5
C) 7 D) 1

- 12) Find x if $m\angle 2 = 3x + 6$ and $m\angle 1 = 5x - 4$.



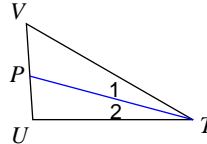
- A) 9 B) 6
C) 3 D) 5

- 13) Find x if $m\angle 2 = 4x + 4$ and $m\angle DBC = 10x - 2$.



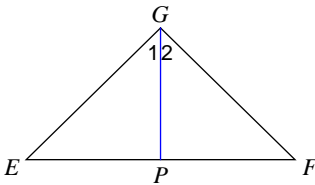
- A) 3 B) 5
C) 6 D) 8

- 14) $m\angle 1 = 6x + 3$ and $m\angle 2 = 8x - 1$.
Find x .



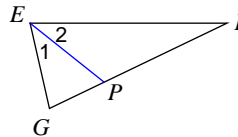
- A) 10 B) 8
C) 2 D) 6

- 15) $m\angle 1 = 5x + 10$ and $m\angle EGF = 12x + 6$.
Find x .



- A) 8 B) 10
C) 7 D) 5

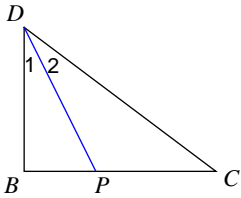
- 16) Find x if $m\angle 2 = 5x - 7$ and $m\angle GEF = 8x + 4$.



- A) 8 B) 9
C) 4 D) 1

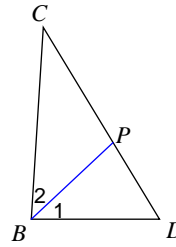


- 17) Find x if $m\angle 1 = 26x$ and $m\angle 2 = 27x - 1$.



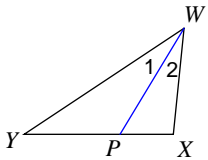
- A) 1 B) 8
C) 5 D) 2

- 18) Find x if $m\angle 1 = 5x + 3$ and $m\angle DBC = 9x + 14$.



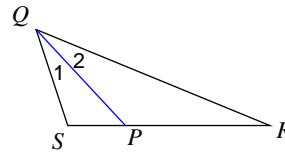
- A) 6 B) 8
C) 2 D) 9

- 19) Find x if $m\angle 1 = 4x + 5$ and $m\angle YWX = 9x + 5$.



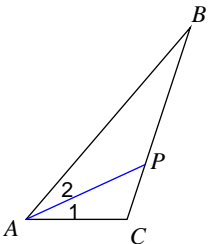
- A) 2 B) 5
C) 7 D) 10

- 20) Find x if $m\angle 2 = 2x + 8$ and $m\angle 1 = 4x - 8$.



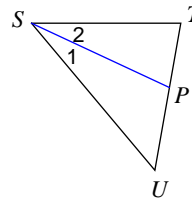
- A) 1 B) 7
C) 8 D) 2

- 21) Find x if $m\angle 1 = 3x + 3$ and $m\angle 2 = 2x + 10$.



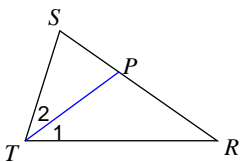
- A) 2 B) 8
C) 7 D) 5

- 22) $m\angle 2 = 11 + 2x$ and $m\angle 1 = 4x - 3$. Find x .



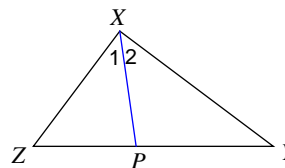
- A) 7 B) 10
C) 2 D) 6

- 23) $m\angle 2 = 10x - 4$ and $m\angle 1 = 9x$. Find x .



- A) 8 B) 6
C) 4 D) 9

- 24) $m\angle 2 = 13 + 4x$ and $m\angle ZXY = 10x + 10$. Find x .



- A) 2 B) 4
C) 8 D) 9



Answers to Assignment (ID: 9)

1) B
5) B
9) D
13) B
17) A
21) C

2) C
6) A
10) B
14) C
18) B
22) A

3) B
7) D
11) D
15) C
19) B
23) C

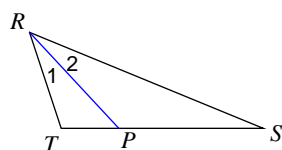
4) B
8) A
12) D
16) B
20) C
24) C



Assignment

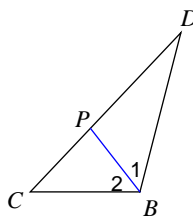
Each figure shows a triangle with one of its angle bisectors.

- 1) Find x if $m\angle 1 = 8x$ and $m\angle 2 = -3 + 9x$.



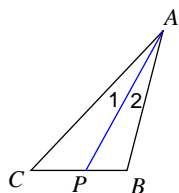
- A) 9 B) 7
C) 3 D) 2

- 2) Find x if $m\angle 2 = 9x - 2$ and $m\angle 1 = 8x + 4$.



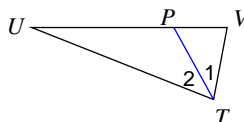
- A) 6 B) 8
C) 1 D) 4

- 3) Find x if $m\angle 1 = 3x - 4$ and $m\angle CAB = 4x + 4$.



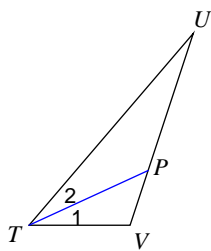
- A) 2 B) 6
C) 1 D) 3

- 4) $m\angle 2 = 3 + 18x$ and $m\angle VTU = 39x$. Find x .



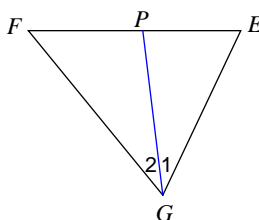
- A) 2 B) 10
C) 9 D) 4

- 5) $m\angle 2 = 3x - 3$ and $m\angle VTU = 5x + 3$. Find x .



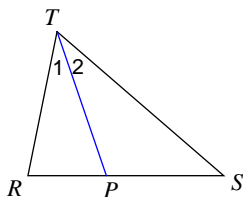
- A) 6 B) 2
C) 9 D) 1

- 6) $m\angle 2 = 4x + 8$ and $m\angle 1 = 6x - 4$. Find x .



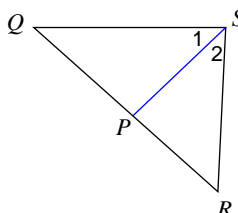
- A) 7 B) 6
C) 8 D) 3

- 7) Find x if $m\angle 1 = 14x + 2$ and $m\angle 2 = 16x - 2$.



- A) 8 B) 2
C) 1 D) 3

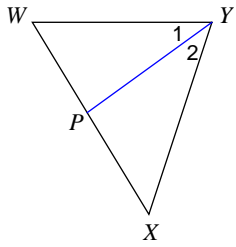
- 8) $m\angle 1 = 43x$ and $m\angle 2 = 44x - 1$. Find x .



- A) 3 B) 1
C) 8 D) 5

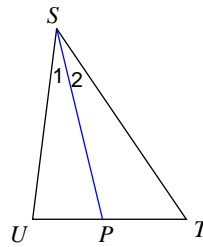


- 9) Find x if $m\angle 2 = 18x$ and $m\angle 1 = 17x + 2$.



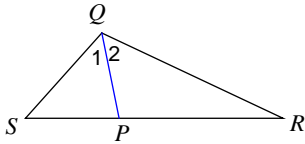
- A) 4 B) 1
C) 9 D) 2

- 10) Find x if $m\angle 2 = x + 10$ and $m\angle UST = -10 + 5x$.



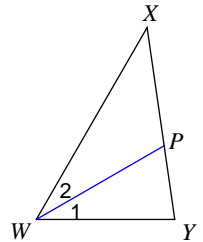
- A) 5 B) 3
C) 9 D) 10

- 11) Find x if $m\angle 1 = 4x + 13$ and $m\angle 2 = 6x - 7$.



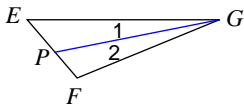
- A) 6 B) 9
C) 10 D) 2

- 12) Find x if $m\angle 1 = 2x + 14$ and $m\angle 2 = 4x - 2$.



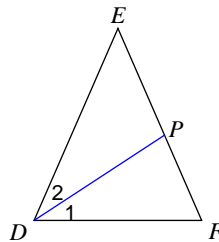
- A) 4 B) 10
C) 5 D) 8

- 13) Find x if $m\angle 1 = 3x - 4$ and $m\angle 2 = x + 6$.



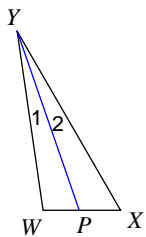
- A) 1 B) 7
C) 5 D) 4

- 14) $m\angle 2 = 16x + 1$ and $m\angle FDE = 33x$. Find x .



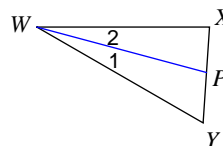
- A) 6 B) 1
C) 2 D) 8

- 15) Find x if $m\angle 1 = x + 1$ and $m\angle 2 = 2x - 9$.



- A) 5 B) 8
C) 10 D) 3

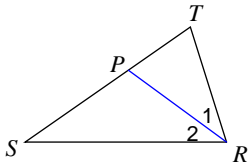
- 16) Find x if $m\angle 2 = 7 + 2x$ and $m\angle YWX = 6x + 6$.



- A) 4 B) 7
C) 5 D) 3

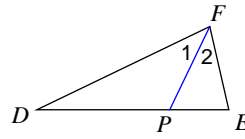


- 17) Find x if $m\angle 2 = 17x + 2$ and $m\angle TRS = 37x - 2$.



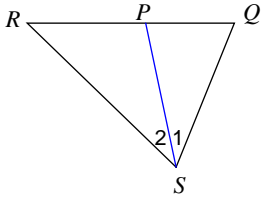
- A) 7 B) 2
C) 9 D) 4

- 18) $m\angle 1 = 6x + 2$ and $m\angle 2 = 5x + 8$. Find x .



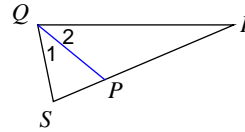
- A) 3 B) 1
C) 5 D) 6

- 19) $m\angle 1 = 7x - 1$ and $m\angle 2 = 5x + 9$. Find x .



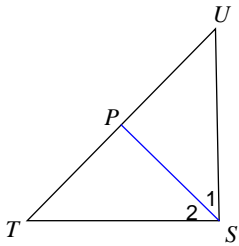
- A) 7 B) 5
C) 8 D) 2

- 20) Find x if $m\angle 2 = 6x - 3$ and $m\angle 1 = 4x + 11$.



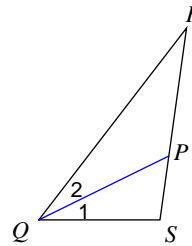
- A) 8 B) 5
C) 7 D) 4

- 21) $m\angle 1 = 9x - 1$ and $m\angle UST = 17x + 3$. Find x .



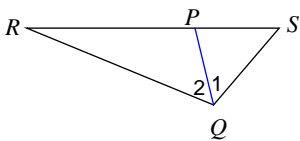
- A) 5 B) 7
C) 10 D) 3

- 22) Find x if $m\angle 1 = 14x - 2$ and $m\angle 2 = 12x + 2$.



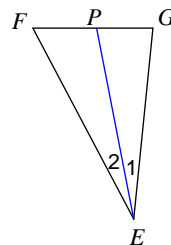
- A) 10 B) 2
C) 8 D) 3

- 23) Find x if $m\angle 1 = 8x + 6$ and $m\angle 2 = 9x$.



- A) 5 B) 4
C) 6 D) 10

- 24) Find x if $m\angle 2 = 3x - 1$ and $m\angle GEF = 5x + 4$.



- A) 7 B) 5
C) 6 D) 8



Answers to Assignment (ID: 10)

1) C
5) C
9) D
13) C
17) B
21) A

2) A
6) B
10) D
14) C
18) D
22) B

3) B
7) B
11) C
15) C
19) B
23) C

4) A
8) B
12) D
16) A
20) C
24) C

