

Triangle Angle Bisectors

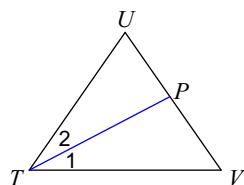
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Name _____

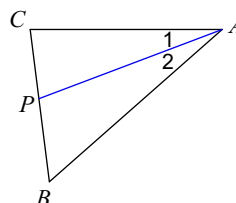
Date _____

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

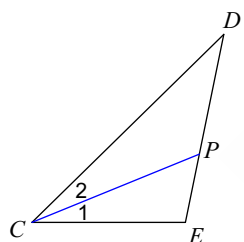
- 1) $m\angle 1 = 8x + 3$ and $m\angle VTU = 18x$.
Find x .



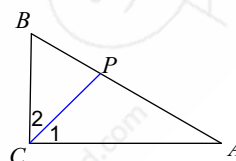
- 2) $m\angle 1 = 3x - 10$ and $m\angle 2 = x + 10$.
Find x .



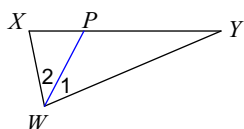
- 3) $m\angle 2 = 3x - 2$ and $m\angle ECD = 5x + 4$.
Find x .



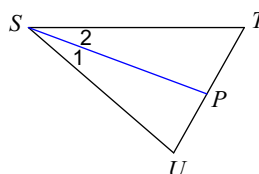
- 4) $m\angle 1 = 4x + 4$ and $m\angle 2 = 3x + 14$.
Find x .



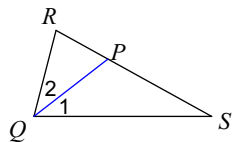
- 5) $m\angle 2 = 39x$ and $m\angle 1 = 38x + 1$.
Find x .



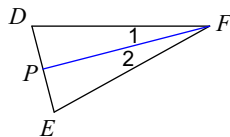
- 6) $m\angle 2 = -7 + 3x$ and $m\angle UST = 4x + 4$.
Find x .



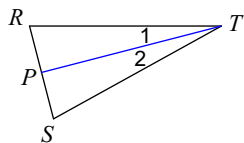
- 7) Find x if $m\angle 1 = 4x + 2$ and $m\angle SQR = 9x - 5$.



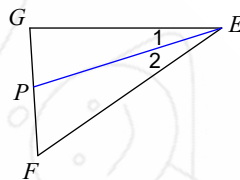
- 8) $m\angle 2 = 14x$ and $m\angle 1 = 15x - 1$. Find x .



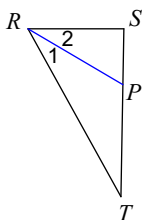
- 9) Find x if $m\angle 2 = 3x + 2$ and $m\angle RTS = 7x$.



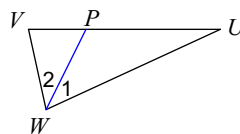
- 10) $m\angle 2 = x + 9$ and $m\angle 1 = 3x - 7$. Find x .



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



- 12) Find x if $m\angle 2 = 5x + 9$ and $m\angle 1 = 7x - 3$.



Answers to Triangle Angle Bisectors

1) 3

5) 1

9) 4

2) 10

6) 9

10) 8

3) 8

7) 9

11) 9

4) 10

8) 1

12) 6

