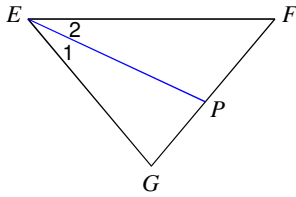


Angle bisectors

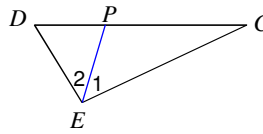
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Each figure shows a triangle with one of its angles bisected. The bisected angles are marked as 1 and 2.

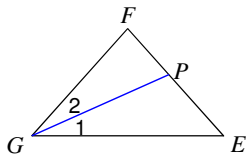
1) Find $m\angle 1$ if $m\angle 2 = 25^\circ$.



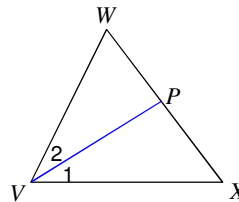
2) $m\angle CED = 96^\circ$. Find $m\angle 1$.



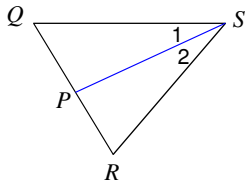
3) Find $m\angle 1$ if $m\angle EGF = 48^\circ$.



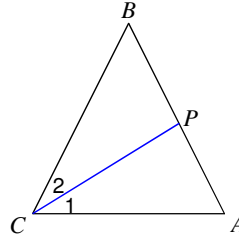
4) Find $m\angle 2$ if $m\angle XVW = 64^\circ$.



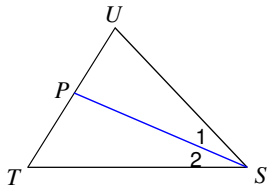
5) $m\angle 1 = 24^\circ$. Find $m\angle 2$.



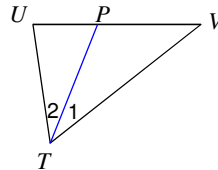
6) Find $m\angle ACB$ if $m\angle 2 = 31^\circ$.



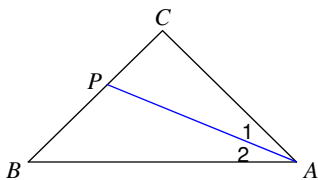
7) Find $m\angle UST$ if $m\angle 2 = 23^\circ$.



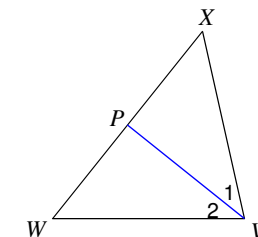
8) $m\angle 2 = 30^\circ$. Find $m\angle 1$.



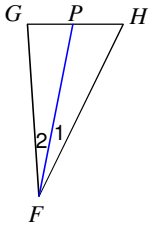
9) $m\angle 2 = 22^\circ$. Find $m\angle CAB$.



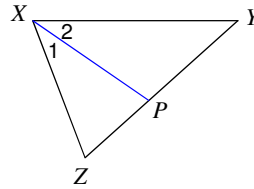
10) Find $m\angle 1$ if $m\angle XVW = 76^\circ$.



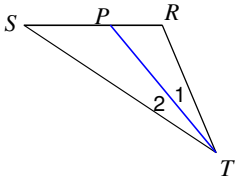
11) $m\angle HFG = 30^\circ$. Find $m\angle 1$.



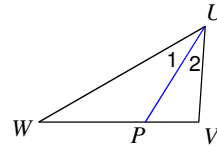
12) $m\angle ZXY = 68^\circ$. Find $m\angle 2$.



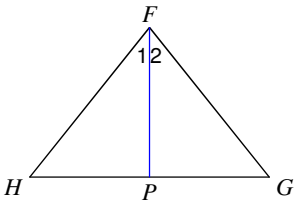
13) Find x if $m\angle 1 = 6x - 1$ and $m\angle RTS = 10x + 4$.



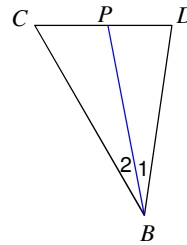
14) $m\angle 2 = 4x + 4$ and $m\angle 1 = 5x - 2$. Find x .



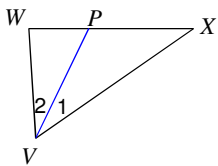
15) Find x if $m\angle 2 = -4 + 7x$ and $m\angle HFG = 11x + 10$.



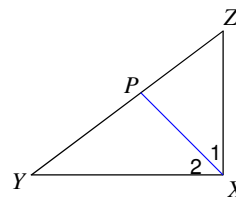
16) Find x if $m\angle 1 = 4x + 3$ and $m\angle 2 = 3x + 7$.



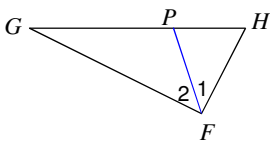
17) $m\angle 2 = 2x + 13$ and $m\angle XVW = 6x + 10$. Find x .



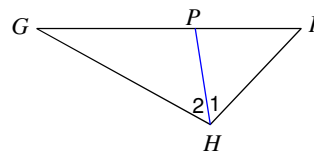
18) $m\angle 2 = 16x - 3$ and $m\angle ZXY = 29x + 3$. Find x .



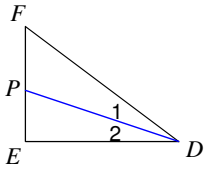
19) $m\angle 2 = 5x + 10$ and $m\angle 1 = -4 + 7x$. Find x .



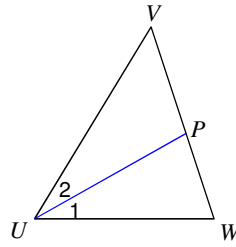
20) Find x if $m\angle 2 = 26x$ and $m\angle FHG = 53x - 2$.



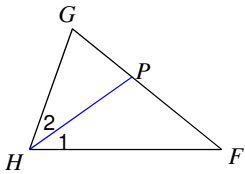
- 21) Find x if $m\angle 2 = 4 + 2x$ and $m\angle FDE = 5x + 1$.



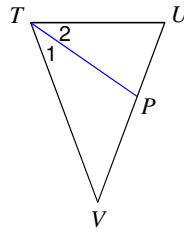
- 22) Find x if $m\angle 2 = 4x - 3$ and $m\angle 1 = 3x + 5$.



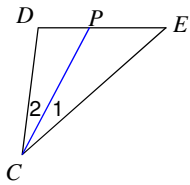
- 23) Find x if $m\angle 2 = 4x + 7$ and $m\angle 1 = 6x - 7$.



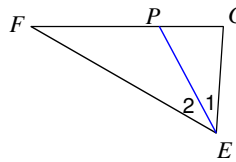
- 24) $m\angle 1 = 4x + 3$ and $m\angle 2 = 5x - 5$. Find x .



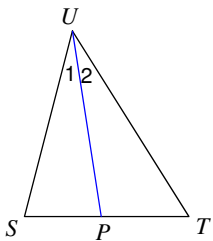
- 25) Find $m\angle 2$ if $m\angle 1 = 10 + x$ and $m\angle 2 = 3x - 10$.



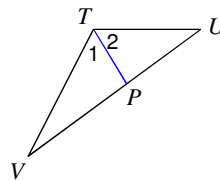
- 26) Find $m\angle 1$ if $m\angle 2 = 33x - 1$ and $m\angle 1 = 32x$.



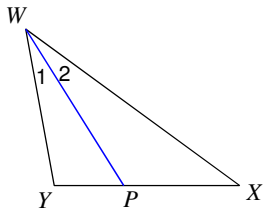
- 27) $m\angle 2 = 22x + 1$ and $m\angle 1 = 24x - 1$. Find $m\angle 2$.



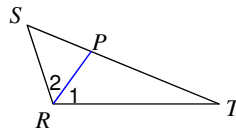
- 28) $m\angle 1 = 6x - 2$ and $m\angle 2 = 4x + 18$. Find $m\angle 2$.



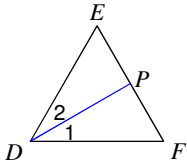
- 29) $m\angle 1 = 2x + 6$ and $m\angle 2 = 3x - 2$.
Find $m\angle 1$.



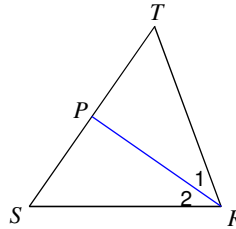
- 30) $m\angle 2 = 14x - 2$ and $m\angle 1 = 13x + 2$.
Find $m\angle 1$.



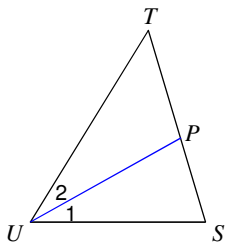
- 31) $m\angle 2 = 10 + 2x$ and $m\angle 1 = 4x - 10$.
Find $m\angle 1$.



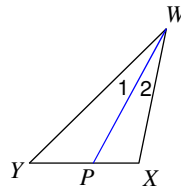
- 32) $m\angle 1 = -1 + 6x$ and $m\angle 2 = 5x + 5$.
Find $m\angle 2$.



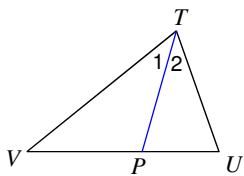
- 33) Find $m\angle SUT$ if $m\angle 2 = x + 19$ and $m\angle SUT = 5x + 8$.



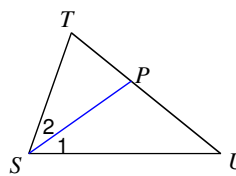
- 34) $m\angle 1 = 1 + 4x$ and $m\angle 2 = 3x + 5$.
Find $m\angle YWX$.



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



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



Answers to Angle bisectors

1) 25°

5) 24°

9) 44°

13) 3

17) 8

21) 7

25) 20°

29) 22°

33) 58°

2) 48°

6) 62°

10) 38°

14) 6

18) 3

22) 8

26) 32°

30) 54°

34) 34°

3) 24°

7) 46°

11) 15°

15) 6

19) 7

23) 7

27) 23°

31) 30°

35) 70°

4) 32°

8) 30°

12) 34°

16) 4

20) 2

24) 8

28) 58°

32) 35°

36) 70°