

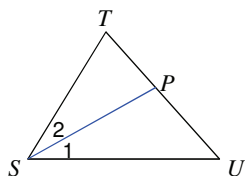
WS 5-1b Angle Bisectors

© 2013 Kuta Software LLC. All rights reserved.

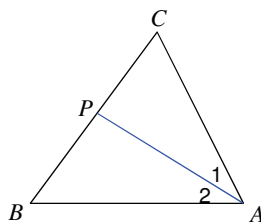
Date _____ Period _____

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

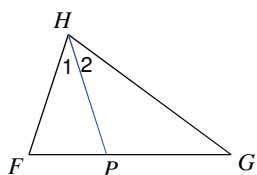
- 1) Find $m\angle UST$ if $m\angle 2 = 29^\circ$.



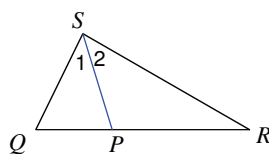
- 2) $m\angle I = 31^\circ$. Find $m\angle CAB$.



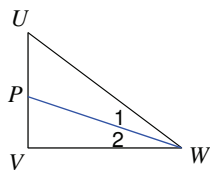
- 3) Find $m\angle 2$ if $m\angle 1 = 36^\circ$.



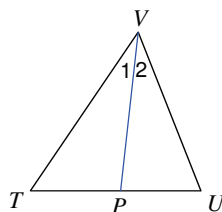
- 4) Find $m\angle QSR$ if $m\angle 2 = 43^\circ$.



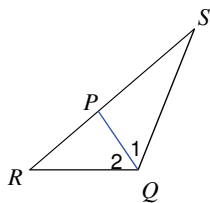
- 5) $m\angle I = 18^\circ$. Find $m\angle UWV$.



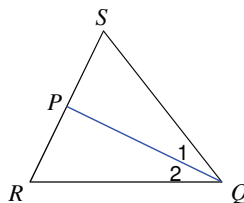
- 6) $m\angle TVU = 56^\circ$. Find $m\angle 2$.



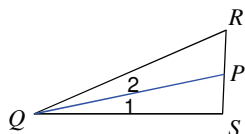
- 7) $m\angle SQR = 112^\circ$. Find $m\angle 2$.



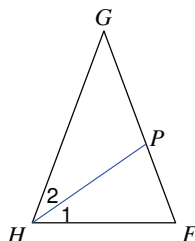
- 8) Find $m\angle SQR$ if $m\angle 2 = 26^\circ$.



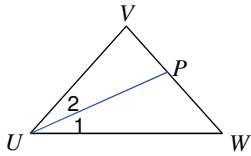
- 9) $m\angle 2 = 12^\circ$. Find $m\angle SQR$.



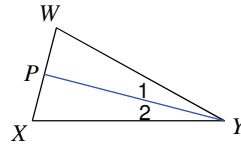
- 10) Find $m\angle FHG$ if $m\angle 2 = 35^\circ$.



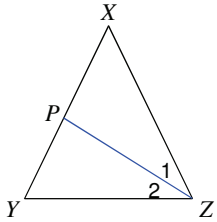
- 11) $m\angle 1 = 25x - 1$ and $m\angle WUV = 1 + 47x$.
Find x .



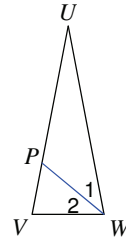
- 12) Find x if $m\angle 2 = 2x - 4$ and $m\angle 1 = x + 5$.



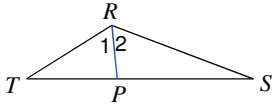
- 13) $m\angle 1 = 3x + 11$ and $m\angle XZY = 9x + 1$.
Find x .



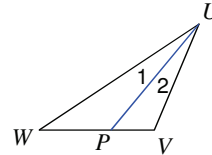
- 14) $m\angle 1 = -6 + 5x$ and $m\angle UWV = 9x - 3$.
Find x .



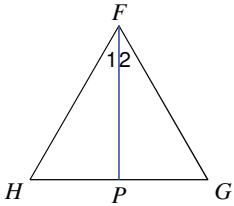
- 15) Find x if $m\angle 1 = 16x - 1$ and $m\angle 2 = 7 + 14x$.



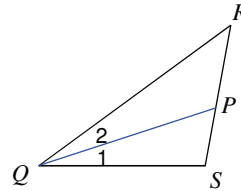
- 16) $m\angle 1 = 4x - 3$ and $m\angle WUV = 7x - 1$.
Find x .



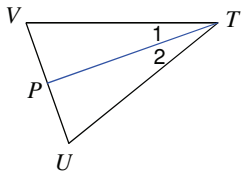
- 17) Find x if $m\angle 1 = 10x$ and $m\angle 2 = 9x + 3$.



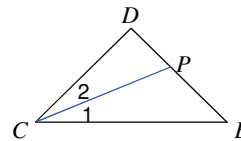
- 18) $m\angle 2 = 3x + 6$ and $m\angle SQR = 9x$.
Find x .



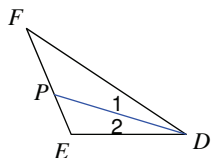
- 19) $m\angle 2 = x + 10$ and $m\angle VTU = 3x + 11$.
Find x .



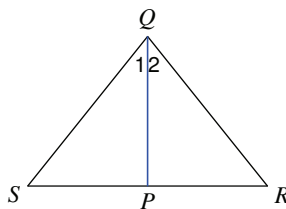
- 20) Find x if $m\angle 1 = 21x + 1$ and $m\angle 2 = 22x$.



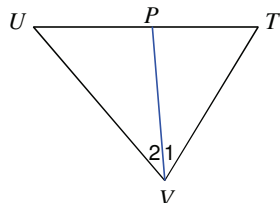
- 21) Find $m\angle 1$ if $m\angle 2 = 4x + 5$ and $m\angle FDE = 12x - 2$.



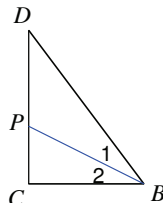
- 22) Find $m\angle SQR$ if $m\angle 1 = 5x + 3$ and $m\angle SQR = 11x - 1$.



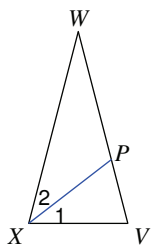
- 23) Find $m\angle 2$ if $m\angle 1 = 8x - 4$ and $m\angle TVU = 15x - 3$.



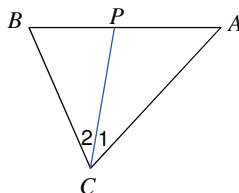
- 24) $m\angle 2 = 7x + 5$ and $m\angle 1 = 9x - 1$. Find $m\angle DBC$.



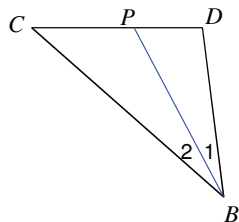
- 25) Find $m\angle VXW$ if $m\angle 1 = 6x + 8$ and $m\angle VXW = 16x - 4$.



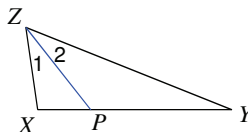
- 26) $m\angle 1 = 3x + 9$ and $m\angle 2 = 5x - 7$. Find $m\angle 2$.



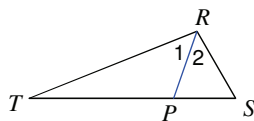
- 27) $m\angle 1 = 11x - 2$ and $m\angle DBC = 20x$. Find $m\angle DBC$.



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



- 29) Find $m\angle 2$ if $m\angle 2 = 5x + 9$ and $m\angle TRS = 12x + 2$.



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

