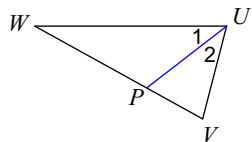


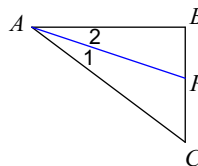
Geometry - Homework 20

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

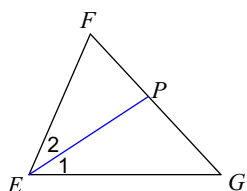
1) $m\angle 1 = 38^\circ$. Find $m\angle WUV$.



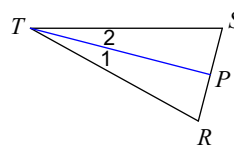
2) Find $m\angle CAB$ if $m\angle 2 = 18^\circ$.



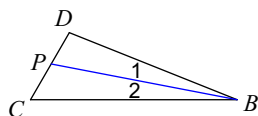
3) Find x if $m\angle 1 = 12x - 3$ and $m\angle GEF = 22x$.



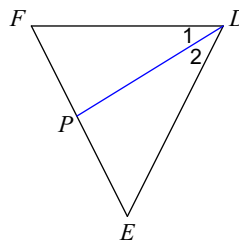
4) $m\angle 1 = 3x - 1$ and $m\angle RTS = 5x + 3$. Find x .



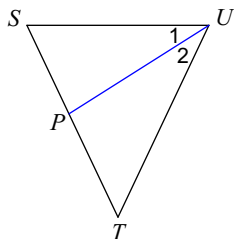
5) $m\angle 1 = 3x - 1$ and $m\angle DBC = 5x + 2$. Find x .



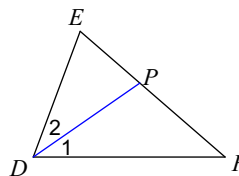
6) $m\angle 1 = 30x + 1$ and $m\angle FDE = 61x + 1$. Find x .



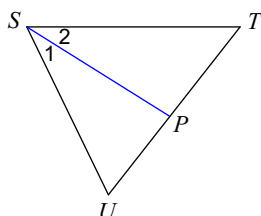
7) Find x if $m\angle 2 = 32x$ and $m\angle 1 = 31x + 1$.



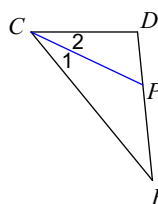
8) Find x if $m\angle 1 = 18x - 1$ and $m\angle FDE = 35x$.



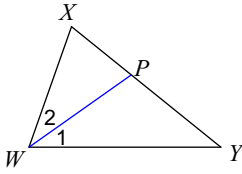
9) Find x if $m\angle 2 = 32x$ and $m\angle UST = 63x + 1$.



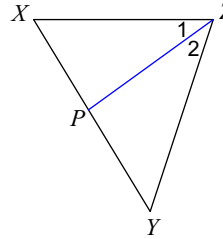
10) $m\angle 1 = 4x + 1$ and $m\angle ECD = 9x - 4$. Find x .



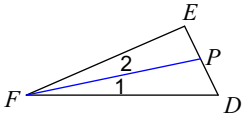
- 11) Find $m\angle 1$ if $m\angle 2 = 2x + 17$ and $m\angle YWX = 8x - 2$.



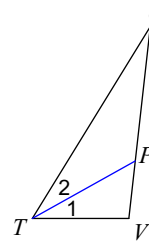
- 12) $m\angle 1 = 13x - 3$ and $m\angle 2 = 11x + 3$. Find $m\angle XZY$.



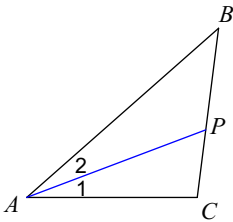
- 13) Find $m\angle DFE$ if $m\angle 1 = 3x + 3$ and $m\angle 2 = 5x - 3$.



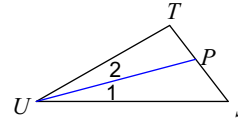
- 14) Find $m\angle VTU$ if $m\angle 1 = 1 + 14x$ and $m\angle VTU = 30x - 2$.



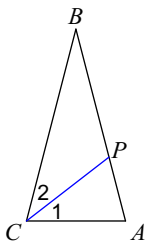
- 15) Find $m\angle 1$ if $m\angle 2 = x + 13$ and $m\angle CAB = 5x + 5$.



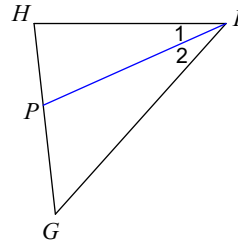
- 16) $m\angle 1 = x + 9$ and $m\angle 2 = 3 + 2x$. Find $m\angle SUT$.



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

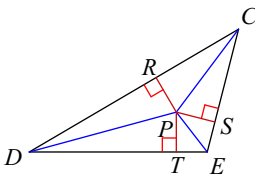


- 18) $m\angle 1 = 15 + x$ and $m\angle 2 = 3x - 3$. Find $m\angle 1$.

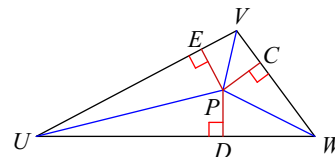


Each figure shows a triangle with its three angle bisectors intersecting at point P.

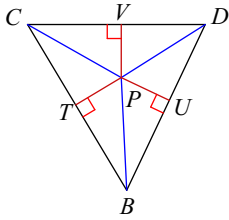
- 19) $PS = 3$. Find PT .



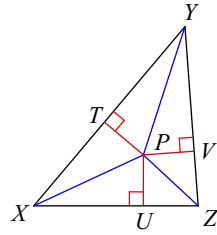
- 20) $PD = 1$. Find PE .



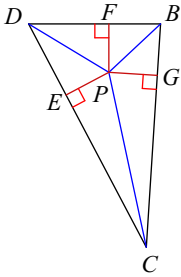
21) Find PT if $PU = 6$.



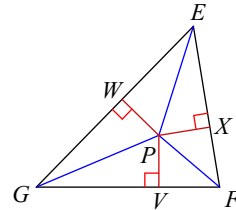
22) Find PV if $PU = 8$.



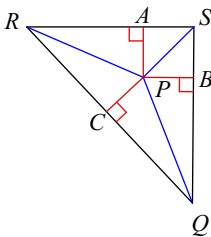
23) $PF = 4$. Find PE .



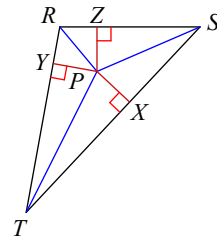
24) $PW = 4$. Find PV .



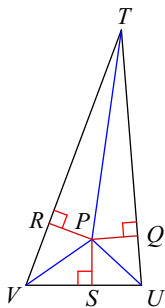
25) $PB = 3$. Find PA .



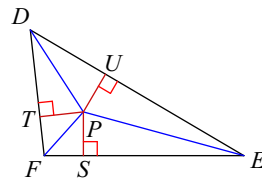
26) $PY = 8$. Find PX .



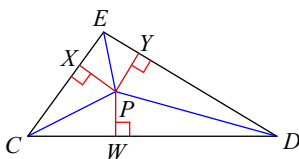
27) Find PQ if $PR = 9$.



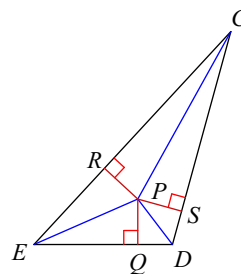
28) $PT = 1$. Find PS .



29) Find PW if $PX = 2$.



30) $PR = 5$. Find PS .



Answers to Geometry - Homework 20

1) 76°

9) 1

17) 38°

25) 3

3) 3

11) 35°

19) 3

27) 9

5) 4

13) 24°

21) 6

29) 2

7) 1

15) 20°

23) 4