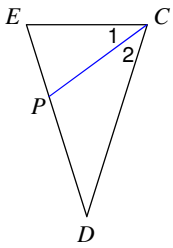
0520 Geometry Name_____

Angle bisectors in a triangle

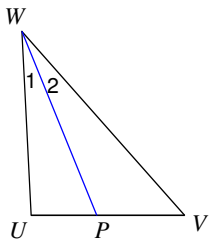
Date_____ Period____

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

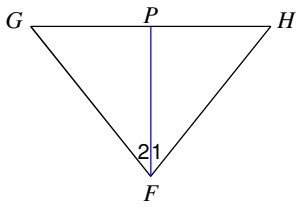
1) Find $m\angle ECD$ if $m\angle 2 = 36°$.



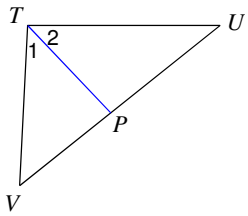
2) $m\angle UWV = 38°$. Find $m\angle 1$.



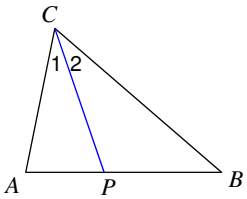
3) $m\angle 2 = 38°$. Find $m\angle HFG$.



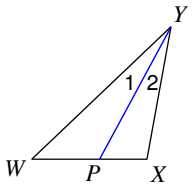
4) Find $m\angle 2$ if $m\angle 1 = 46°$.



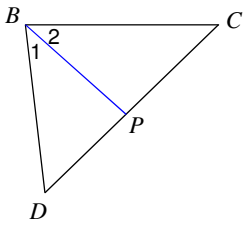
5) Find $m\angle 2$ if $m\angle ACB = 60°$.



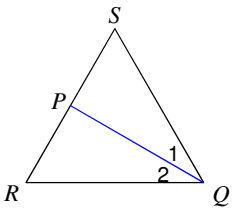
6) Find $m\angle WYX$ if $m\angle 1 = 18°$.



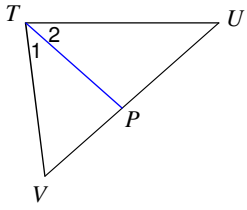
7) $m\angle DBC = 82°$. Find $m\angle 2$.



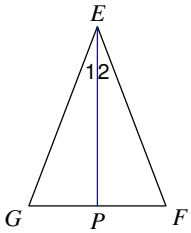
8) $m\angle 1 = 30°$. Find $m\angle SQR$.



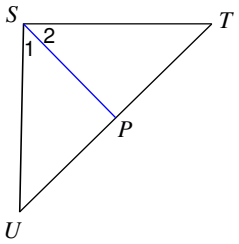
9) $m\angle 2 = 41°$. Find $m\angle 1$.



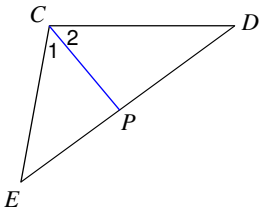
10) $m\angle 1 = 21°$. Find $m\angle GEF$.



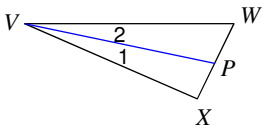
11) Find x if $m\angle 1 = 8x + 5$ and $m\angle 2 = 10x - 5$.



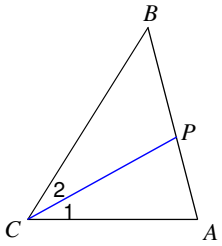
12) $m\angle 2 = 51x - 1$ and $m\angle 1 = 50x$. Find x.



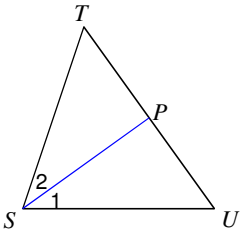
13) Find x if $m\angle 1 = x + 6$ and $m\angle 2 = 3x - 6$.



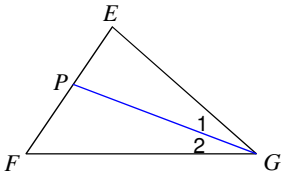
14) $m\angle 2 = 4 + 5x$ and $m\angle 1 = 4x + 9$. Find x.



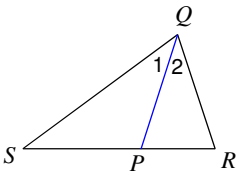
15) $m\angle 2 = 35x$ and $m\angle UST = 71x - 1$. Find x.



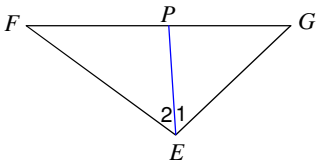
16) $m\angle 1 = 3x - 7$ and $m\angle 2 = 2x + 2$. Find x.



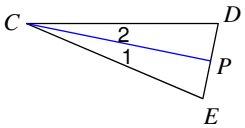
17) $m\angle 1 = 8x - 4$ and $m\angle 2 = 7x + 1$. Find x.



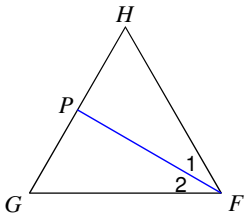
18) Find x if $m\angle 1 = 6x + 2$ and $m\angle 2 = 7x - 6$.



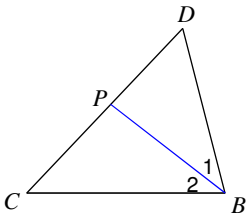
19) Find x if $m\angle 1 = 12x - 1$ and $m\angle 2 = 11x$.



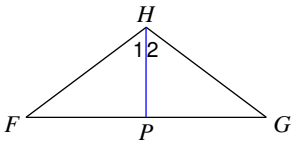
20) $m\angle 1 = 3x + 3$ and $m\angle 2 = 4x - 6$. Find x.



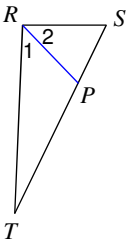
21) $m\angle 2 = 12x + 2$ and $m\angle 1 = 13x - 1$.
Find $m\angle DBC$.



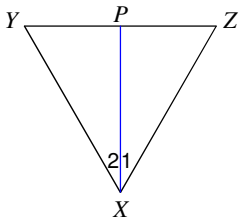
22) $m\angle 1 = 7x - 3$ and $m\angle FHG = 12x + 10$.
Find $m\angle FHG$.



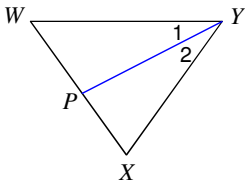
23) $m\angle 2 = 10x - 4$ and $m\angle 1 = 9x + 1$.
Find $m\angle 2$.



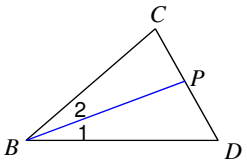
24) $m\angle 1 = 9x + 3$ and $m\angle ZXY = 20x$.
Find $m\angle 1$.



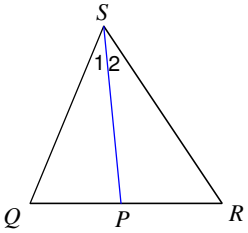
25) Find $m\angle WYX$ if $m\angle 2 = 4x - 9$ and $m\angle 1 = 3x$.



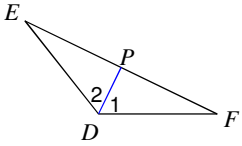
26) Find $m\angle DBC$ if $m\angle 1 = 2x$ and $m\angle 2 = x + 10$.



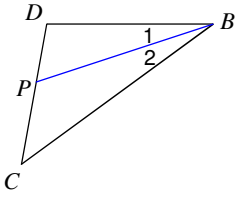
27) Find $m\angle QSR$ if $m\angle 1 = 2x + 12$ and $m\angle 2 = 4x - 4$.



28) Find $m\angle 2$ if $m\angle 1 = 22x - 2$ and $m\angle 2 = 20x + 4$.



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



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