

Monday, October 15, 2013

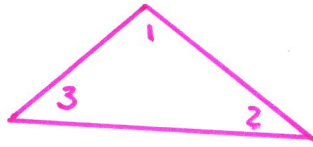
4-2 Triangle Facts #10

I. Triangle Sum Theorem...

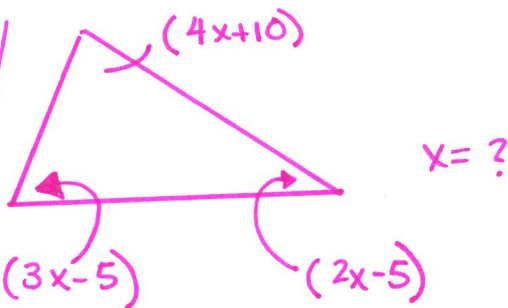
"3 angles in a triangle add to equal 180°!"

ex/

$m\angle 1 = 70^\circ$	Given
$m\angle 1 + m\angle 2 + m\angle 3 = 180$	Δ Sum Theorem

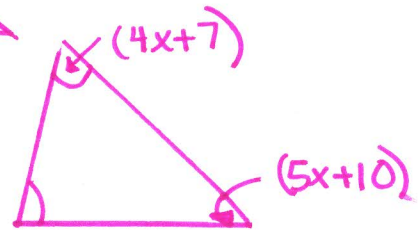


ex/



$$\begin{aligned} (3x-5) + (2x-5) + (4x+10) &= 180 \\ 9x+0 &= 180 \\ 9x &= 180 \\ x &= 20 \end{aligned}$$

ex/

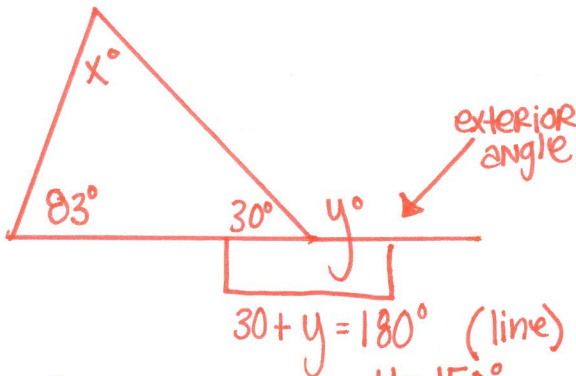


$$(4x+7) + (4x+7) + (5x+10) = 180$$

? congruent!

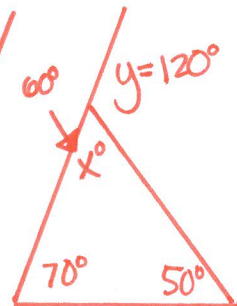
$$\begin{aligned} 13x+24 &= 180 \\ 13x &= 156 \\ x &= 12 \end{aligned}$$

ex/



$$\begin{aligned} 30 + y &= 180^\circ \text{ (line)} \\ y &= 150^\circ \\ x + 83 + 30 &= 180 \\ x + 113 &= 180 \\ x &= 67^\circ \end{aligned}$$

ex/



$$\begin{aligned} 70 + 50 + x &= 180 \\ \cancel{120} + x &= 180 \\ 120 + x &= 180 \\ x &= 60 \end{aligned}$$