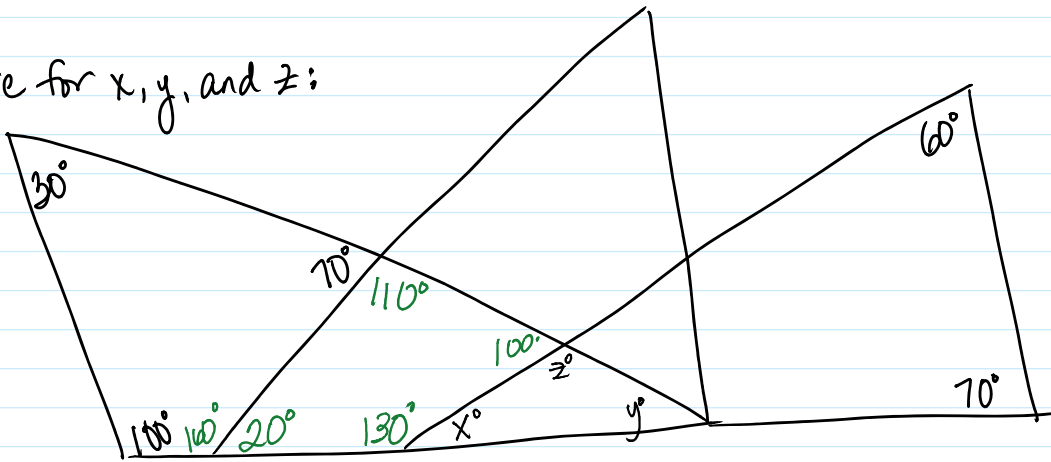


① Solve for x , y , and z :



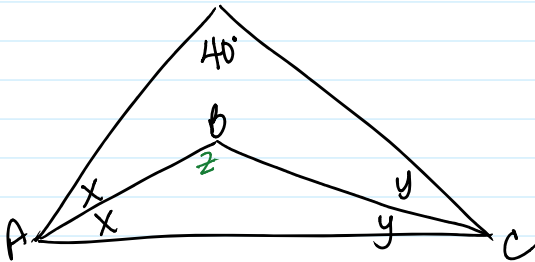
$$\begin{aligned}x &= 50 \\y &= 50 \\z &= 80\end{aligned}$$

② The ratio of three angles in a triangle is 2:3:7.
Find the average of the 3 measures.

$$\begin{aligned}2x + 3x + 7x &= 180 \\12x &= 180 \\x &= 15\end{aligned}$$

$$\frac{30 + 45 + 105}{3} = 60$$

③ Solve for $m \angle ABC$



$$2x + 2y + 40 = 180$$

$$2x + 2y = 140$$

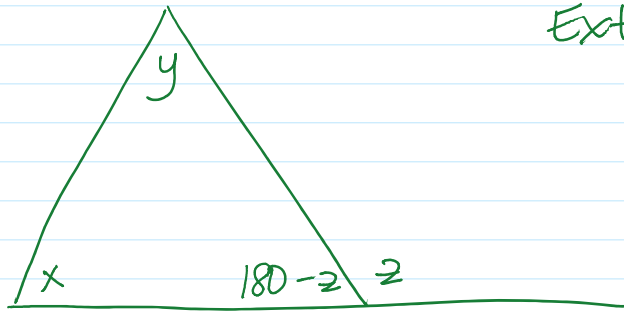
$$x + y = 70$$

$$x + y + z = 180$$

$$70 + z = 180$$

$$z = 110$$

Exterior angles in Triangles



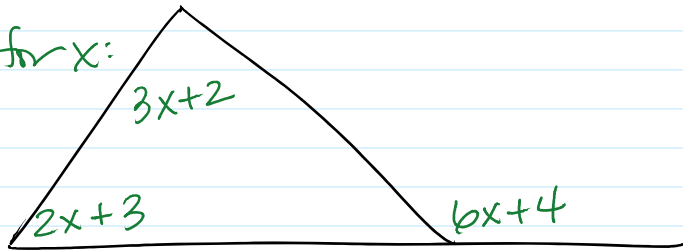
Ext \neq RI

$$x + y + 180 - z = 180$$

$$x + y = z$$

$$\text{Ext} = R1_1 + R1_2$$

Solve for x:

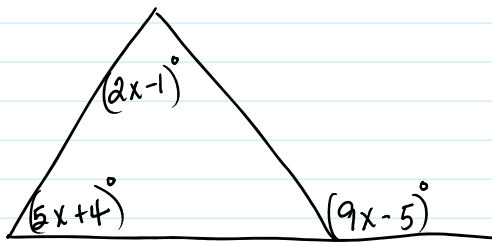


$$6x + 4 = 3x + 2 + 2x + 3$$

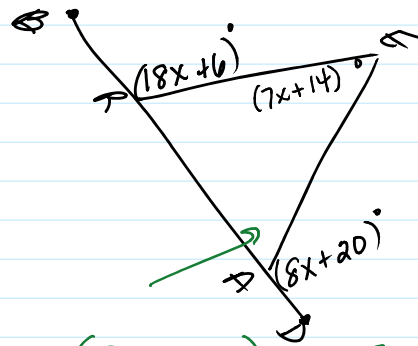
$$6x + 4 = 5x + 5$$

$$x = 1$$

④ Solve for x:



⑤ Find m \angle EAR



$$180 - (8x + 20) + 7x + 14 = 18x + 6$$

$$-8x + 160 + 7x + 14 = 18x + 6$$

$$-x + 174 = 18x + 6$$

$$168 = 19x$$

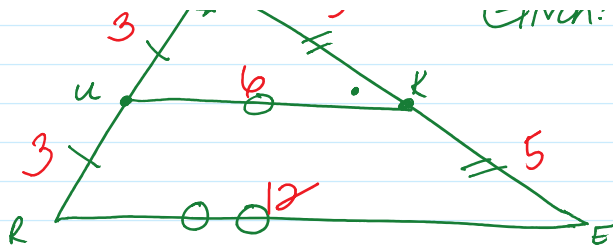
$$\frac{168}{19} = x$$

Midline Thm:



Given: Midpts

a. $\overline{TK} \parallel \overline{RE}$

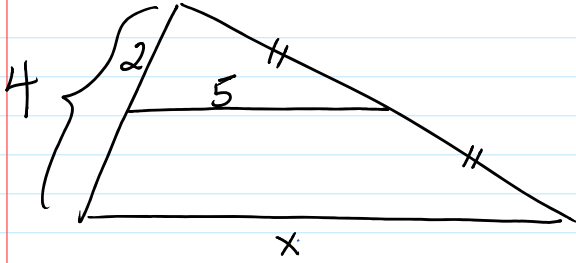


Given: Midpt

a. $\overline{UK} \parallel \overline{RE}$

b. $2UK = RE$

⑥ Solve for x:



⑦ Find the perimeter of the inside square, found by connecting midpoints of sides of the larger square.

