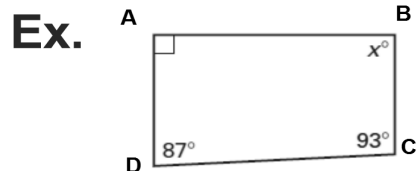


Parallelograms are quadrilaterals

The sum of the measures of the interior angles of a quadrilateral is 360° .

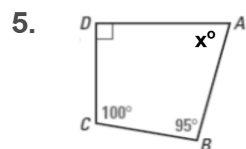


$$90 + 87 + 93 + x = 360$$

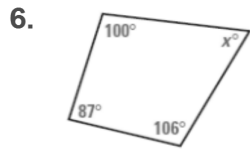
$$\begin{array}{r} 270 + x = 360 \\ -270 \quad -270 \\ \hline x = 90 \end{array}$$

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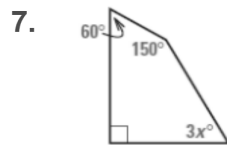
Student Practice:



x =



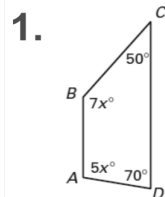
x =



x =

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Solve for x. Then find the measure of $\angle A$ and $\angle B$.



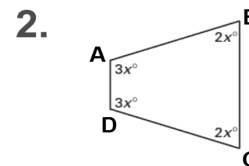
$$x = 20$$

$$m\angle A = 5(20) = 100^\circ$$

$$m\angle B = 7(20) = 140^\circ$$

$$50 + 7x + 5x + 70 = 360$$

$$\begin{array}{r} 12x + 120 = 360 \\ -120 \quad -120 \\ \hline 12x = 240 \\ \frac{12x}{12} = \frac{240}{12} \\ x = 20 \end{array}$$



$$x = 36$$

$$m\angle A = 3(36) = 108^\circ$$

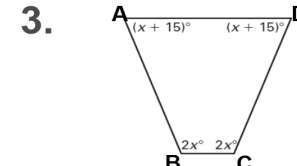
$$m\angle B = 2(36) = 72^\circ$$

$$m\angle C = 2(36) = 72^\circ$$

$$m\angle D = 3(36) = 108^\circ$$

$$3x + 3x + 2x + 2x = 360$$

$$\begin{array}{r} 10x = 360 \\ \frac{10x}{10} = \frac{360}{10} \\ x = 36 \end{array}$$



$$x = 55$$

$$m\angle A = 55 + 15 = 70^\circ$$

$$m\angle B = 2(55) = 110^\circ$$

$$m\angle C = 2(55) = 110^\circ$$

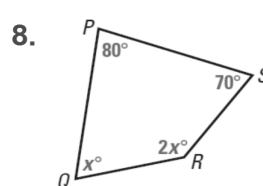
$$m\angle D = 55 + 15 = 70^\circ$$

$$x + 15 + x + 15 + 2x + 2x = 360$$

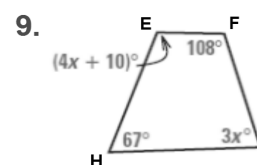
$$\begin{array}{r} 6x + 30 = 360 \\ -30 \quad -30 \\ \hline 6x = 330 \\ \frac{6x}{6} = \frac{330}{6} \\ x = 55 \end{array}$$

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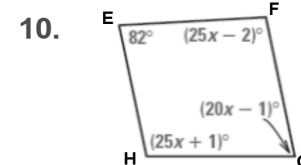
Student Practice:



x =
m \angle Q =
m \angle R =



x =
m \angle E =
m \angle G =



x =
m \angle F =
m \angle G =
m \angle H =

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