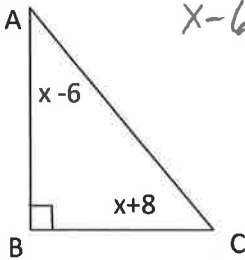


Topic 15 Practice Quiz
Triangles & Algebra

Key

1)

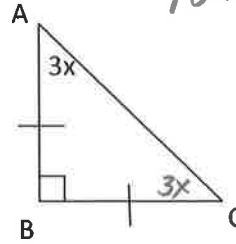


$$\begin{aligned} x-6+x+8+90 &= 180 \\ 2x+92 &= 180 \\ 2x &= 88 \\ x &= 44 \end{aligned}$$

Final Answers:

$$\begin{aligned} x &= 44 \\ \angle A &= 38 \\ \angle B &= 90 \\ \angle C &= \frac{52}{180} \checkmark \end{aligned}$$

2)

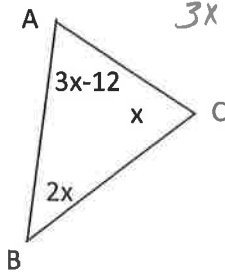


$$\begin{aligned} 90+3x+3x &= 180 \\ 90+6x &= 180 \\ 6x &= 90 \\ x &= \frac{90}{6} \\ x &= 15 \end{aligned}$$

Final Answers:

$$\begin{aligned} x &= 15 \\ \angle A &= 45 \\ \angle B &= 90 \\ \angle C &= \frac{45}{180} \checkmark \end{aligned}$$

3)

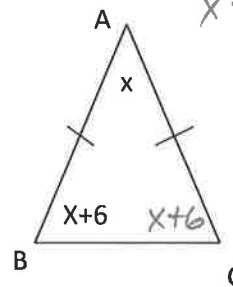


$$\begin{aligned} 3x-12+x+2x &= 180 \\ 6x-12 &= 180 \\ 6x &= 192 \\ x &= 32 \end{aligned}$$

Final Answers:

$$\begin{aligned} x &= 32 \\ \angle A &= 84 \\ \angle B &= 64 \\ \angle C &= \frac{32}{180} \checkmark \end{aligned}$$

4)

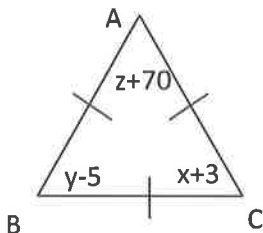


$$\begin{aligned} x+x+6+x+6 &= 180 \\ 3x+12 &= 180 \\ 3x &= 168 \\ x &= 56 \end{aligned}$$

Final Answers:

$$\begin{aligned} x &= 56 \\ \angle A &= 56 \\ \angle B &= 62 \\ \angle C &= \frac{62}{180} \checkmark \end{aligned}$$

5)



Final Answers:

$$\begin{aligned} x &= 57 & \angle A &= 60 \\ y &= 65 & \angle B &= 60 \\ z &= -10 & \angle C &= 60 \\ & & & \frac{180}{180} \checkmark \end{aligned}$$