

Geo HW 3-2 Ans

① $3^2 + 4^2 = 5^2$
 $25 = 25$
yes

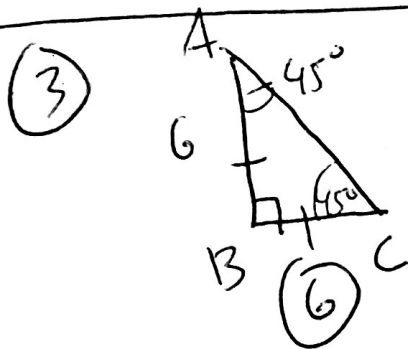
$4^2 + 5^2 = 6^2$
 $41 = 36 \times$
no

$2^2 + 2^2 = (\sqrt{8})^2$
 $8 = 8$
yes

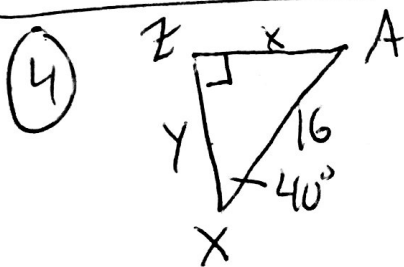
② $6^2 + 8^2 = x^2$
 $100 = x^2$
 $x = 10$
 $6^2 + x^2 = 8^2$
 $x = \sqrt{28}$

$4^2 + 7^2 = x^2$
 $x = \sqrt{65}$
 $4^2 + x^2 = 7^2$
 $x = \sqrt{33}$

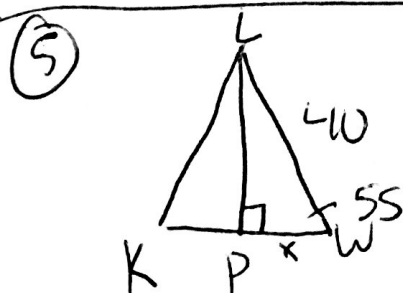
$10^2 + (\sqrt{200})^2 = x^2$
 $x = \sqrt{300}$
 $10^2 + x^2 = (\sqrt{200})^2$
 $x = 10$



$6^2 + 6^2 = x^2$
 $x = \sqrt{72}$

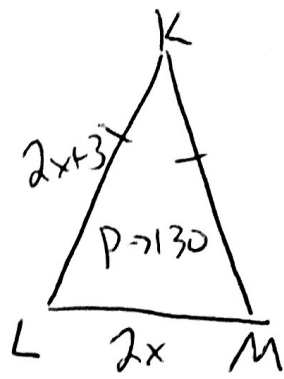


$m\angle A = 180 - 90 - 40 = 50^\circ$
 $\frac{\sin 40}{1} = \frac{x}{16} \quad x = 10.28$
 $\frac{\cos 40}{1} = \frac{y}{16} \quad y = 12.26$



$\frac{\cos(55)}{1} = \frac{x}{40}$
 $x = 22.94$

6



* legs isos Δ are =
 * sides add to perim

$$2x+3+2x+3+2x=130$$

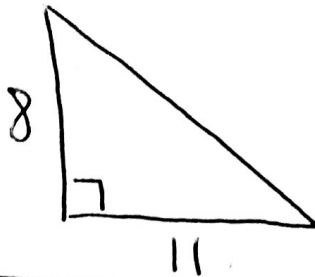
$$6x+6=130$$

$$6x=124$$

$$x=\frac{62}{3}$$

$$KM = 2\left(\frac{62}{3}\right) + 3 = \frac{133}{3}$$

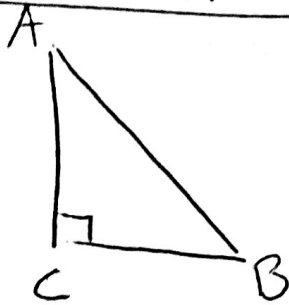
7



$$8^2 + 11^2 = x^2$$

$$x = \sqrt{185}$$

8

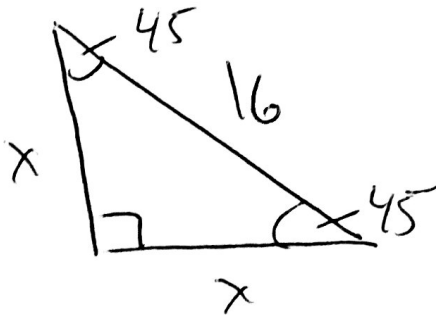


$$\sin A = \frac{BC}{AB}$$

$$\cos A = \frac{AC}{AB} \quad \times$$

$$\cos B = \frac{BC}{AB} \quad \checkmark$$

9



$$x^2 + x^2 = 16^2$$

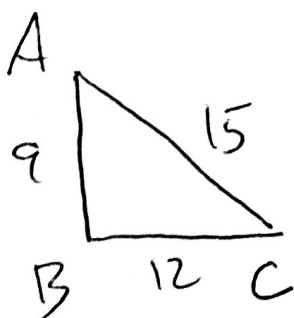
$$2x^2 = 16^2$$

$$\frac{2x^2}{2} = \frac{256}{2}$$

$$\sqrt{x^2} = \sqrt{128}$$

$$x = \sqrt{128}$$

10



$$9^2 + 12^2 \stackrel{?}{=} 15^2$$

$$225 = 225 \quad \checkmark$$

yes b/c sides make
 rt Δ