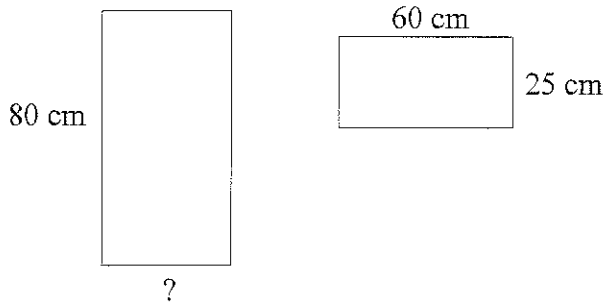


Name: _____

1. Explain how angles in similar figures are related.

they are congruent

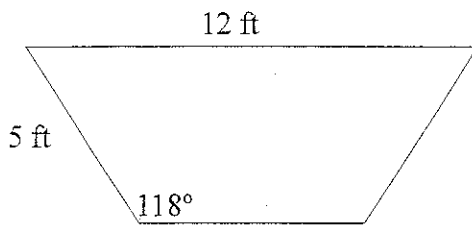
2. Find the missing side length, the figures are similar



$$\frac{60}{80} = \frac{25}{x}$$

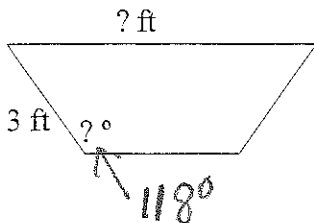
33.33 cm

3. Find the missing side length and angle, the figures are similar.

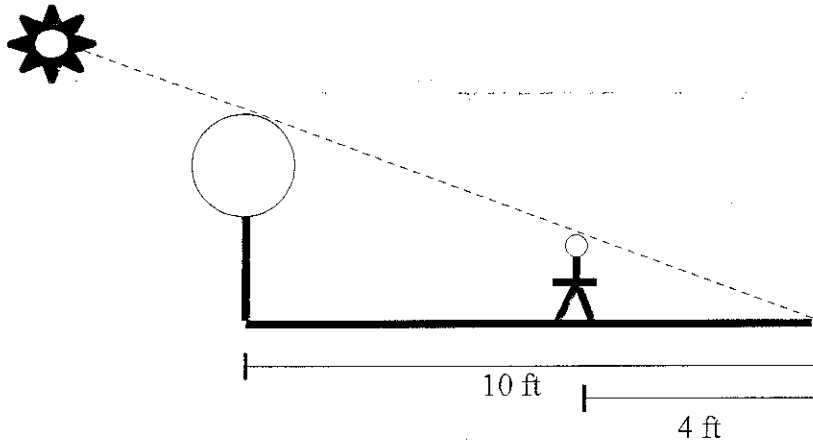


$$\frac{5}{3} = \frac{12}{x}$$

7.2 ft



4. Joline is 5' 8" tall, on a bright summer day her shadow is 4' long. She is standing near a tree which casts a 10' shadow. How tall is the tree?

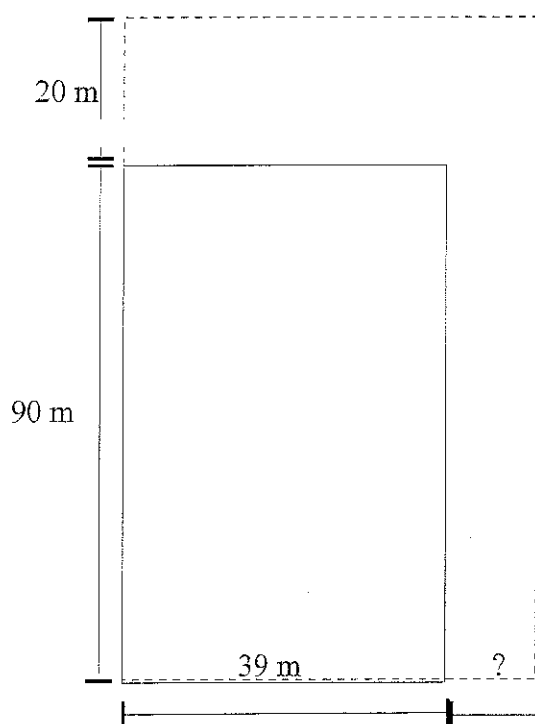


$$5' 8'' = 5.6667 \text{ ft}$$

$$\frac{10}{4} = \frac{x}{5.6667}$$

$$14.17 \text{ ft}$$

5. A school football field which is 90m by 39m is made 20 meters longer, how many meters wider must it be made to keep the shape similar?



$$\frac{90}{110} = \frac{39}{x}$$

$$x = 47.67$$

$$- 39$$

$$8.67 \text{ m}$$