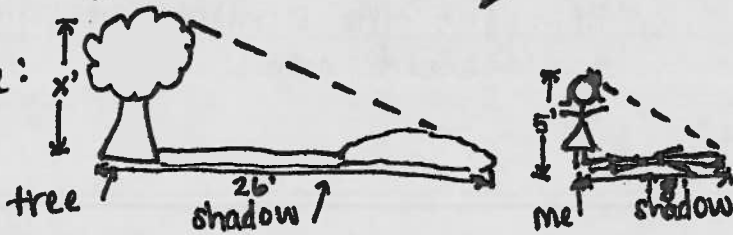


Similar Figures

Name: _____

Per: _____

Example:



$$\frac{x'}{26'} = \frac{5'}{8'}$$

← heights
← shadows

↑ ↑
tree Me

Cross product! $x \cdot 8 = 26 \cdot 5$

$$\frac{8x}{8} = \frac{130}{8}$$

$$x = 16.25'$$

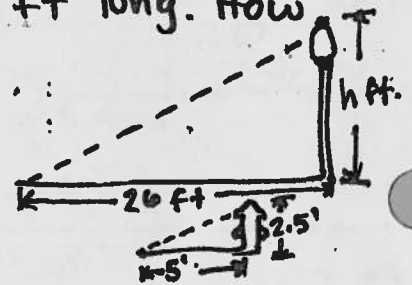
The tree is 16.25 feet tall.

EXAMPLE

1. A fire hydrant is 2.5 feet tall & casts a shadow that is 5 ft. long. A street light casts a shadow that is 26 ft long. How tall is the street light?

$$\frac{\square}{26} = \frac{2.5}{\square}$$

↑ fill in the blanks & solve.



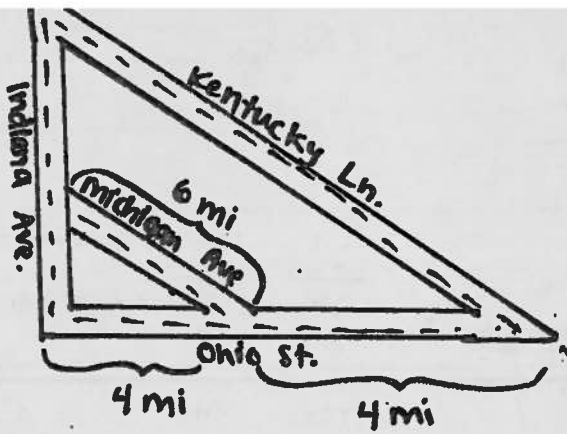
2. A flag pole is casting a shadow that is 50 ft. long. At the same time, I am standing by the flag pole & have a shadow that is 9 ft. long. I am 5.5 feet tall. How tall is the flag pole? Draw a picture for yourself! :)

$$\frac{\square}{50} = \frac{\square}{9}$$

← height
← shadows

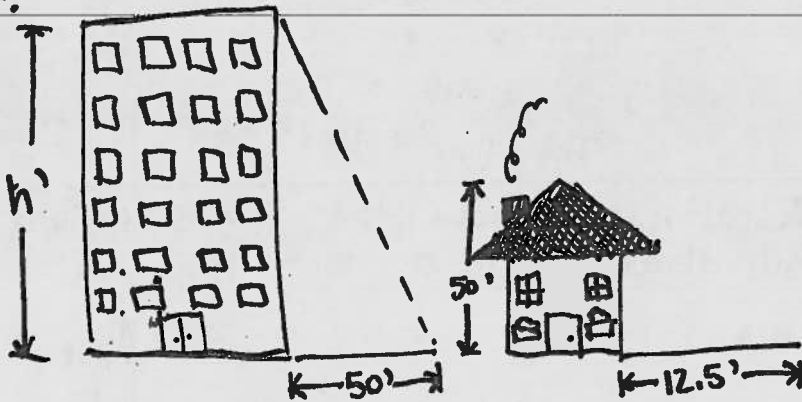
↑ ↑
flag pole me

3.



Find the length of Kentucky Ln.
Set up a proportion & solve it.
Highlight the similar triangles with
2 different colors.

4.

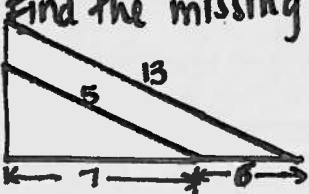


How tall is the apartment
building? Highlight the
similar triangles, write
a proportion, & solve.

5. At 7 ft. 2 in., Margo Dydek is one of the tallest women to play professional basketball. Her coach, Carolyn Peck, is 6 ft. 4 in. tall. If Ms. Peck casts a shadow that is 4 ft. long, how long would Ms. Dydek's shadow be? Round to the nearest tenth.

Hint: convert their heights & shadows
to inches first!

6. Find the missing side



7. Find the unit rate for
each bottle.
\$9.88 for a 12-pack
of gatorade.

8. ^{Solve for x:}
 $90 = 41x$

9. Solve for x:
 $16.2 = \frac{x}{5}$