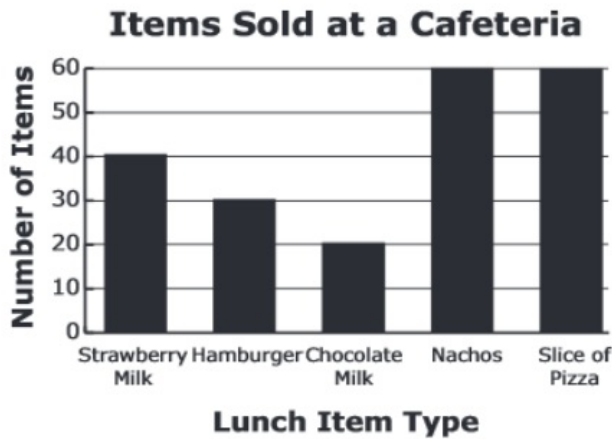


January 20, 2015 ^{5th} _{6th} Starter

1. The graph shows the number of lunch items sold at a school cafeteria in one day.



At this rate, how many nachos will be sold in 5 days? _____

2. Of the choices below, what is the best estimate of the length of a cell phone?

- A 6 meters
- B 6 centimeters
- C 6 kilometers

3. Complete the sequence.

8, 24, 72, 216, _____

4. Write $<$, $>$, or $=$ in each blank.

$\frac{10}{11}$ _____ $\frac{19}{21}$ _____ $\frac{10}{12}$

Free Mellow

1/20 Shadow Problems using Proportion

Remember: You can find missing measurements in similar figures by using proportions.

These two triangles are similar.

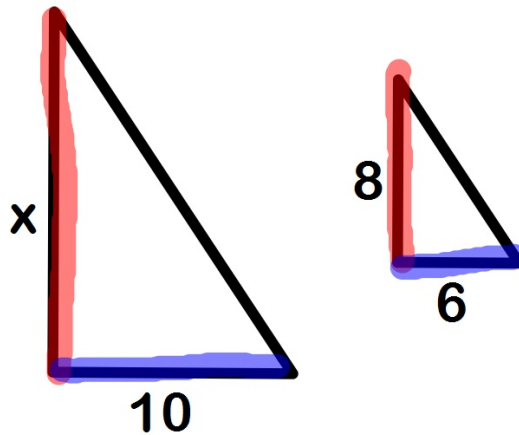
Find the missing side measurement

$$\frac{3 \cdot X}{3 \cdot 10} = \frac{8 \cdot 5}{6 \cdot 5}$$

$$\frac{3x}{30} = \frac{40}{30}$$

$$\frac{3x}{3} = \frac{40}{3}$$

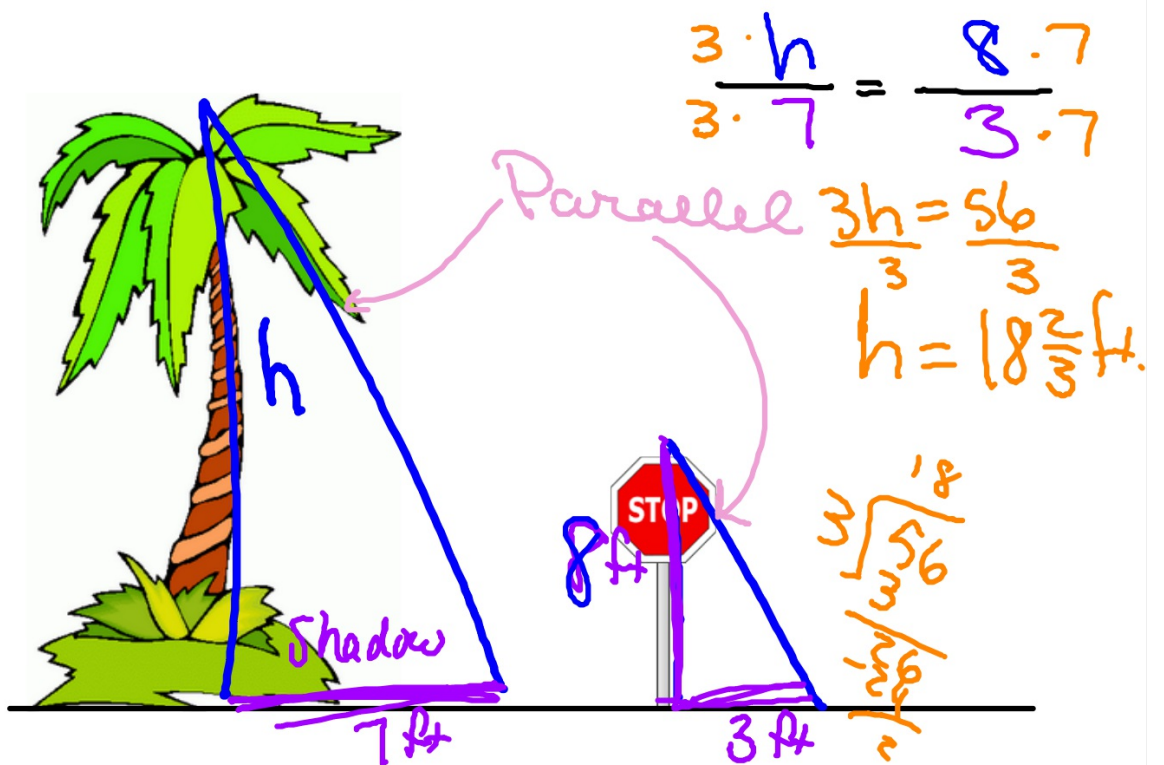
$$x = 13\frac{1}{3}$$





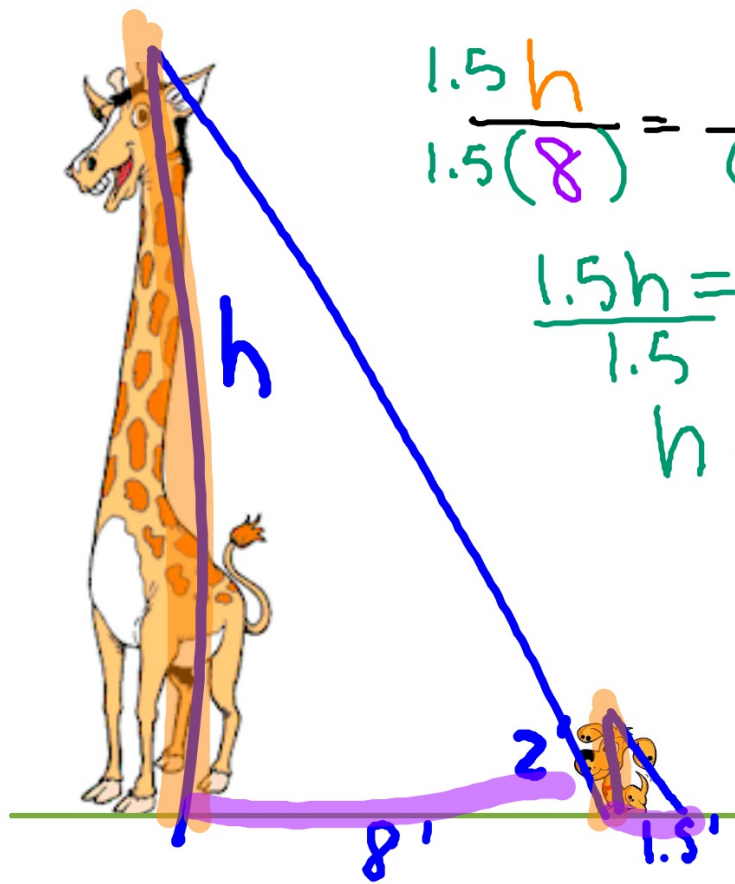
You can find the height of tall things without ever leaving the ground! Use Proportions!!

How tall is this palm tree?





Find the height of this giraffe.

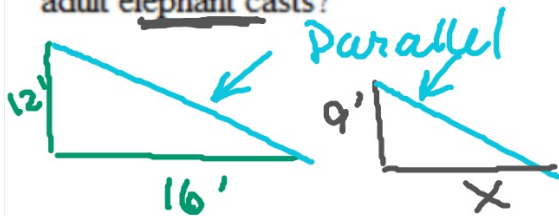


$$\frac{1.5h}{1.5(8)} = \frac{2 \cdot 8}{(1.5)8}$$

$$\frac{1.5h}{1.5} = \frac{16}{1.5}$$

$$h = 10.67 \text{ ft}$$

If a 12 ft tall statue casts a 16 ft long shadow then how long is the shadow that a 9 ft tall adult elephant casts?



$$3 \cdot \frac{12}{3 \cdot 16} = \frac{9 \cdot 4}{x \cdot 4}$$

$$\frac{48}{4} = \frac{4x}{4}$$

$$12 \text{ ft} = x$$

A bird bath that is 4 ft tall casts a shadow that is 8 ft long. Find the height of a woman that casts a 12 ft shadow.

Homework

Blue WS3

Due Wednesday