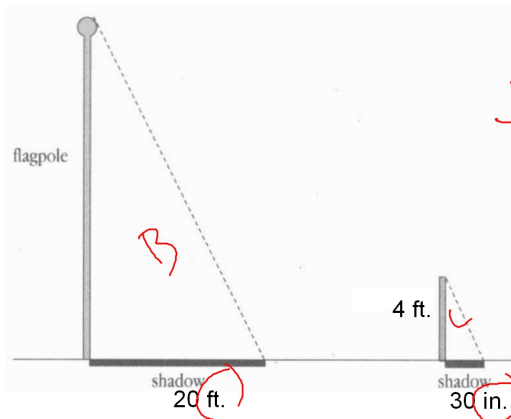


1. Find the height of the flagpole. Be careful!



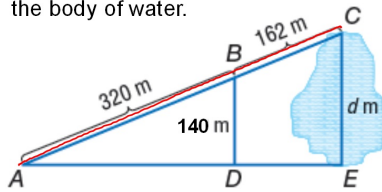
$$\frac{B}{L} = \frac{X}{4}$$

$$\frac{X}{4} = \frac{20}{2.5}$$

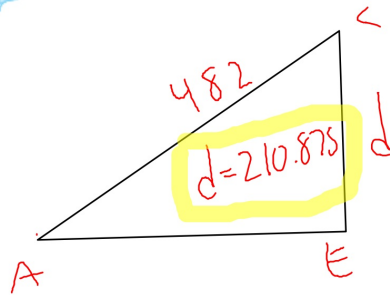
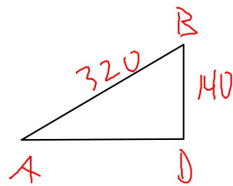
$$X = 32 \text{ ft}$$

Convert this to 2.5 ft.

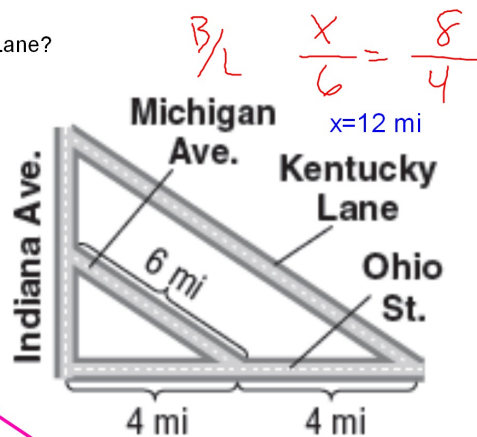
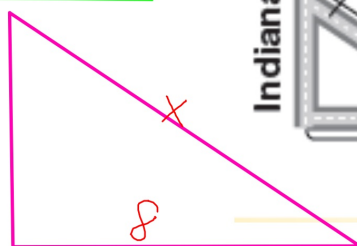
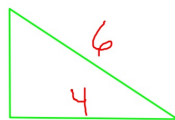
2. Use the measurements made on land to find the distance across the body of water.



$$\frac{320}{482} = \frac{140}{d}$$



3. How long is Kentucky Lane?



$$\frac{B}{L} = \frac{X}{6}$$

$$\frac{X}{6} = \frac{8}{4}$$

$$X = 12 \text{ mi}$$

Using Similar Figures:

Scale Drawings:

Drawing of an actual object that is either larger (enlargement) or smaller (reduction) than the actual object but similar to it.

$$\text{Scale of a drawing} = \frac{\text{drawing measure}}{\text{actual measure}}$$

Does each scale represent an enlargement or a reduction?

1. 5:6

Reduction $5/6 < 1$

2. 45:2

Enlargement $45/2 > 1$

3. 2:1

Enlargement $2/1 > 1$
(drawing is twice as big)

4. 1:3

Reduction $1/3 < 1$
(Drawing is one third the size)

5. 1:1

Figures are the same size so we would call them Congruent instead of Similar.