

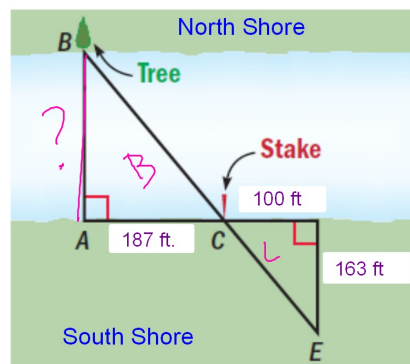
1. The price for a barrel of crude oil is 3196.08 Rubles/barrel (Rubles is Russian currency) Convert this into \$US per gallon

1 Liter = 1.0567 qts    1 barrel = 119.24 Liters  
 \$1 US = 32.73 Rubles    4 qts = 1 gallon

$$\frac{3196.08 \text{ R}}{1 \text{ B}} \cdot \frac{\$1 \text{ us}}{32.73 \text{ R}} \cdot \frac{1 \text{ B}}{119.24 \text{ L}} \cdot \frac{1 \text{ L}}{1.0567 \text{ q}} \cdot \frac{4 \text{ qt}}{1 \text{ gal}}$$

\$3.10/gal

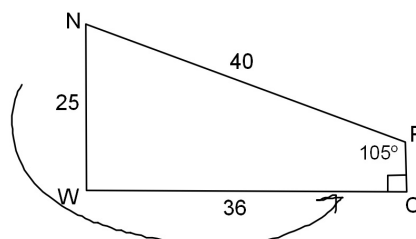
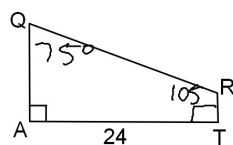
2. To measure the distance across a river measurements were taken on the South Shore. How far is it directly across the river from the South Shore to the North Shore?



$$\frac{163}{187} = \frac{100}{AB}$$

304.81

3. These two figures are similar.



- a. Write a similarity statement.

$$\triangle QRT \sim \triangle NWP$$

- c. Find the measure of  $\angle N$ .

$$75^\circ$$

- b. Find the measure of  $\angle R$ .  $\approx 105^\circ$

- d. Find the length of  $\overline{QR}$ .

Use a proportion:

$$\frac{QR}{40} = \frac{24}{36}$$

$$QR = 26.67$$