Unit 7 CFA practice Date:

1. Given that $\frac{x}{y} = \frac{7}{2}$, determine if the following statements are true or false.

a.) 7x = 2y b.) $\frac{y}{2} = \frac{x}{7}$ c.) $\frac{y}{x} = \frac{7}{2}$

2. Given that $\frac{n}{8} = \frac{12}{16}$ determine if the following statements are true or false.

a.) 16n = 96 b.) $\frac{n}{8} = \frac{16}{12}$ c.) $\frac{n+8}{8} = \frac{7}{4}$

3. Given that $\frac{1}{c+5} = \frac{2}{3}$ determine if the following statements are true or false.

a.) 3 = c+5 b.) $\frac{c+5}{1} = \frac{3}{2}$ c.) $\frac{c+6}{c+5} = \frac{5}{3}$

4. Given that $\frac{x+3}{4} = \frac{7}{8}$ determine if the following statements are true or false.

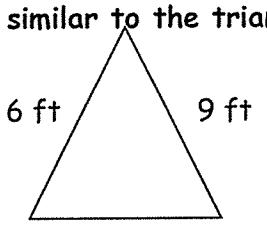
a.) 7x+21 = 32 b.) $\frac{4}{x+3} = \frac{8}{7}$ c.) $\frac{x+7}{x} = \frac{15}{8}$

5. A scale model of a car is 3 in long. The actual car is 11 feet long. What is the ratio of the length of the actual car to the length of the model car? (12 in = 1 ft)

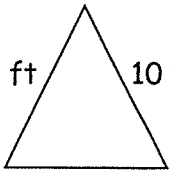
6. A scale model of a toy is 5 in long. The actual toy is 8 feet long. What is the ratio of the length of the actual car to the length of the model car? (12 in = 1 ft)

7. The height of a light house 183 ft. A model of the light house is 24 in tall. Find the the height of the light house over the height of the model

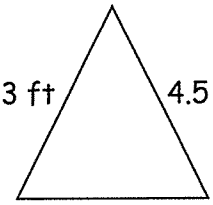
8. Which triangle is similar to the triangle below?



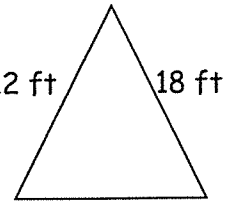
A. 8 ft 10 ft



B. 3 ft 4.5 ft

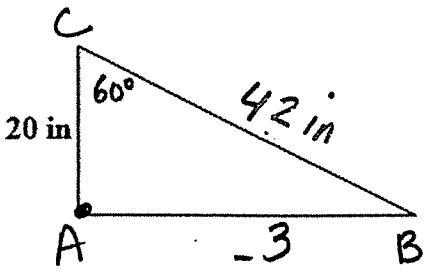


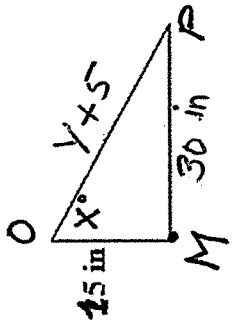
C. 12 ft 18 ft



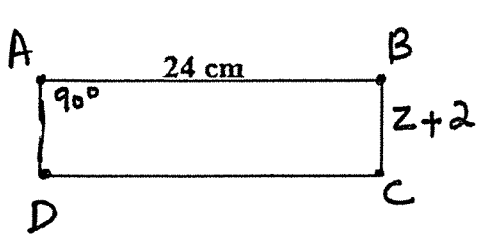
Explain

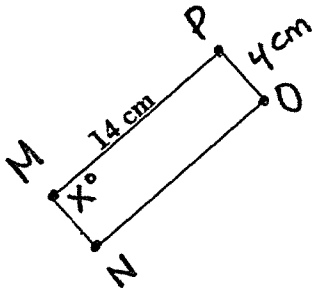
8. ABC ~ MPO. Solve for x, y, and z. Show complete work.





9. ABCD ~ MPON. Solve for x, y and z. Show complete work.





10. ABCD ~ MPON Solve for x, y, and z. Show complete work.