

NAME \_\_\_\_\_

DATE \_\_\_\_\_

## SIMILAR TRIANGLES: Worksheet 1

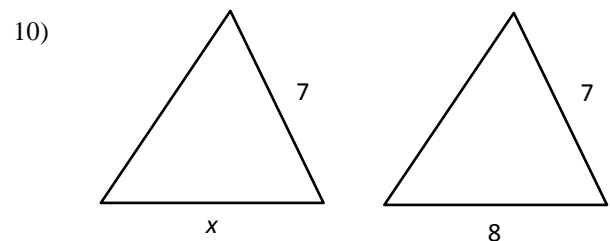
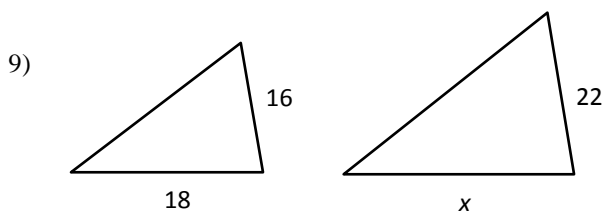
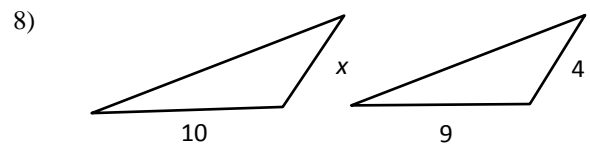
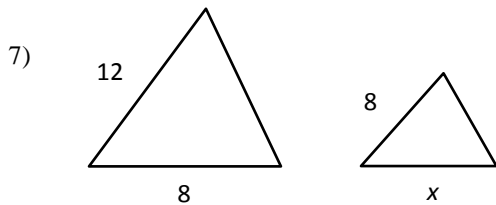
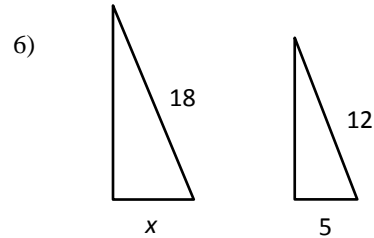
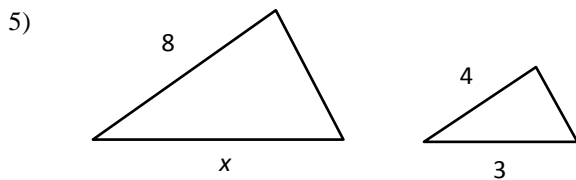
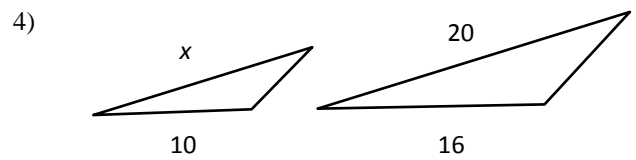
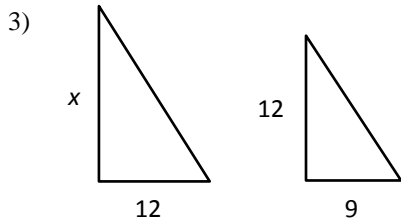
Solve the following proportions for  $n$ .

1)  $\frac{3}{n} = \frac{8}{10}$

2)  $\frac{2.4}{5} = \frac{n}{20}$

Find  $x$  in the following pairs of similar triangles. Triangles are not to scale.

**Proportions may vary to solve for answer.**



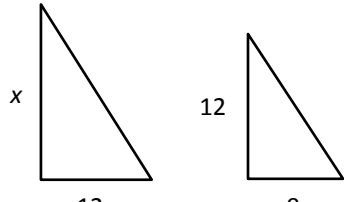
KEY  
SIMILAR TRIANGLES: Worksheet 1

Solve the following proportions for  $n$ .

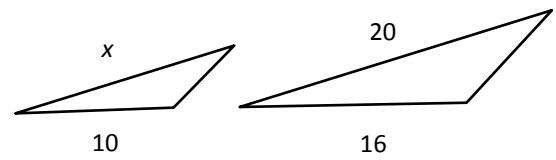
$$2) \quad \frac{3}{n} = \frac{8}{10} \quad n = (3 \cdot 10) \div 8 = 3.75$$

$$2) \quad \frac{2.4}{5} = \frac{n}{20} \quad n = (2.4 \cdot 20) \div 5 = 9.6$$

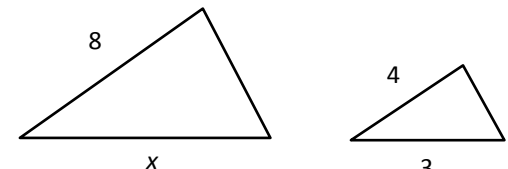
Find  $x$  in the following pairs of similar triangles. Triangles are not to scale.  
**Proportions may vary to solve for answer.**

3) 

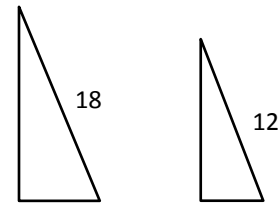
$$\frac{x}{12} = \frac{12}{9} \quad x = (12 \cdot 12) \div 9 = 16$$

4) 

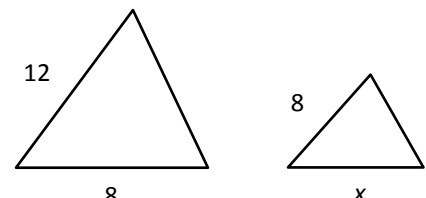
$$\frac{x}{20} = \frac{10}{16} \quad x = (20 \cdot 10) \div 16 = 12.5$$

5) 

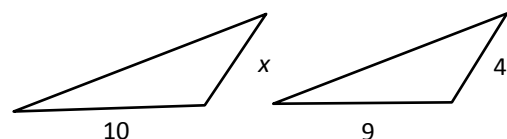
$$\frac{8}{4} = \frac{x}{3} \quad x = (8 \cdot 3) \div 4 = 6$$

6) 

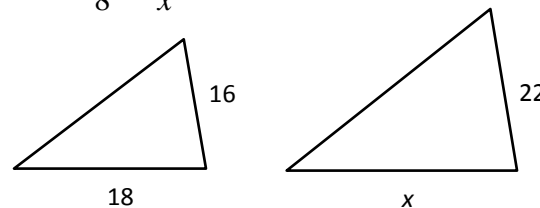
$$\frac{18}{12} = \frac{x}{5} \quad x = (18 \cdot 5) \div 12 = 7.5$$

7) 

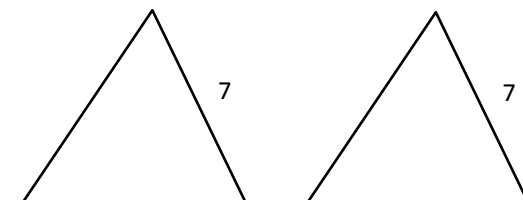
$$\frac{12}{8} = \frac{8}{x} \quad x = (8 \cdot 8) \div 12 = 5.\bar{3}$$

8) 

$$\frac{x}{4} = \frac{10}{9} \quad x = (4 \cdot 10) \div 9 = 4.\bar{4}$$

9) 

$$\frac{16}{22} = \frac{18}{x} \quad x = (22 \cdot 18) \div 16 = 24.75$$

10) 

$$\frac{7}{7} = \frac{x}{8} \quad x = (7 \cdot 8) \div 7 = 8$$