

NAME _____

DATE _____

SIMILAR TRIANGLES: Worksheet 3

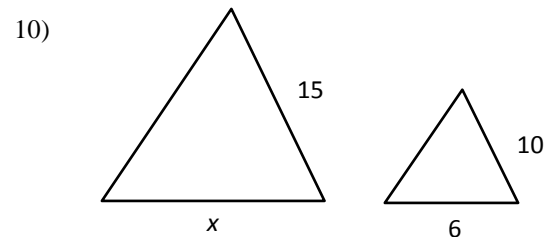
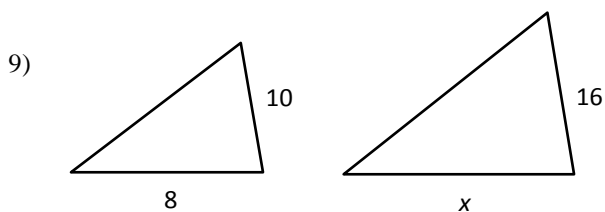
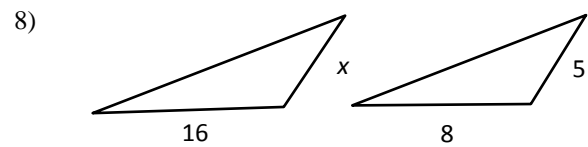
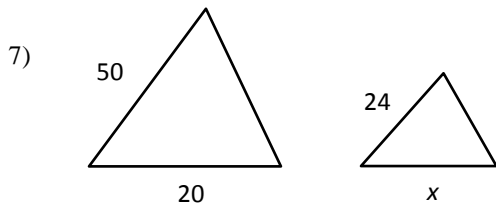
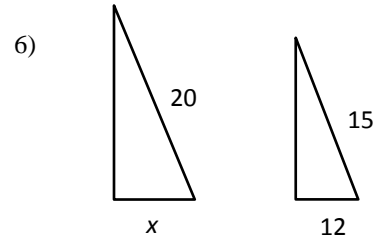
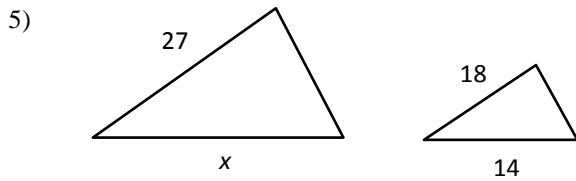
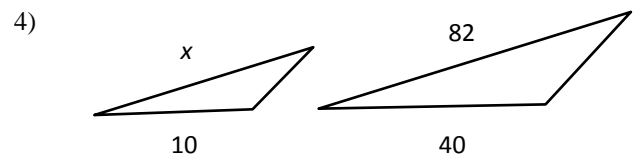
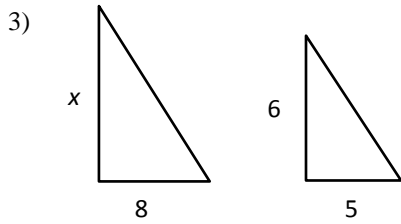
Solve the following proportions for n .

1) $\frac{14.5}{n} = \frac{5}{100}$

2) $\frac{120}{300} = \frac{n}{20}$

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 3

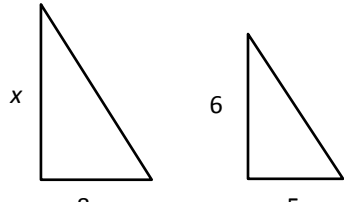
Solve the following proportions for n .

$$2) \quad \frac{14.5}{n} = \frac{5}{100} \quad n = (14.5 \cdot 100) \div 5 = 290$$

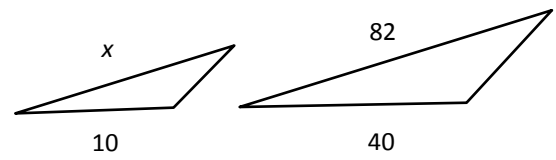
$$2) \quad \frac{120}{300} = \frac{n}{20} \quad n = (120 \cdot 20) \div 300 = 8$$

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

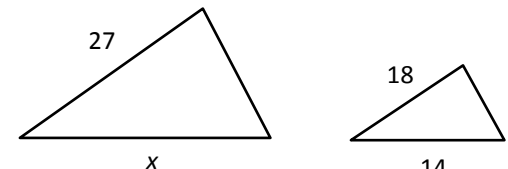
Proportions may vary to solve for answer.

3) 

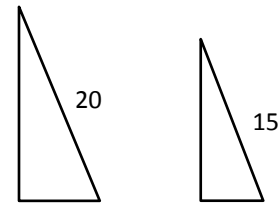
$$\frac{x}{6} = \frac{8}{5} \quad x = (6 \cdot 8) \div 5 = 9.6$$

4) 

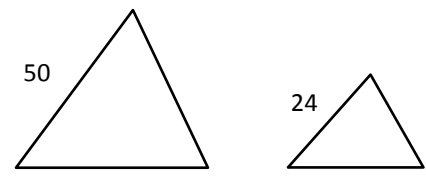
$$\frac{x}{82} = \frac{10}{40} \quad x = (82 \cdot 10) \div 40 = 20.5$$

5) 

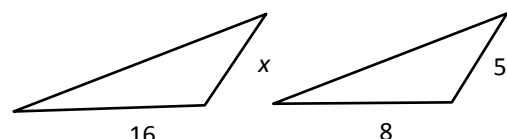
$$\frac{27}{18} = \frac{x}{14} \quad x = (27 \cdot 14) \div 18 = 21$$

6) 

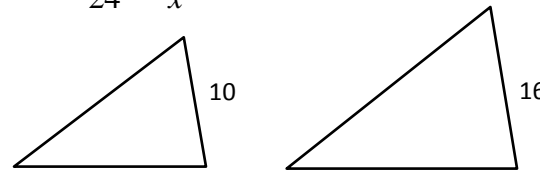
$$\frac{20}{15} = \frac{x}{12} \quad x = (20 \cdot 12) \div 15 = 16$$

7) 

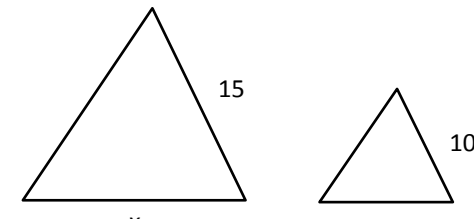
$$\frac{50}{24} = \frac{20}{x} \quad x = (24 \cdot 20) \div 50 = 9.6$$

8) 

$$\frac{x}{5} = \frac{16}{8} \quad x = (5 \cdot 16) \div 8 = 10$$

9) 

$$\frac{10}{16} = \frac{8}{x} \quad x = (16 \cdot 8) \div 10 = 12.8$$

10) 

$$\frac{15}{10} = \frac{x}{6} \quad x = (15 \cdot 6) \div 10 = 9$$