Name: _____

SOLVING TWO STEP EQUATIONS

1) $4h + 6 = 34$

Solve for h = _____

2) $7y + 5 = -9$

Solve for y = _____

3) $\frac{r}{5} + 17 = 21$

Solve for r = _____

4) $\frac{d}{3} + 4 = 10$

Solve for d = _____

5) Jenna bought 5 reams of paper at the store for a total of $21. The tax on her purchase was $1. Solve $5x + 1 = 21$ to find the price for each ream of paper, X.

6) It took Lisa 85 minutes to wash three cars. She spent x minutes on each car, and 10 minutes putting everything away. Which equation matches this situation?

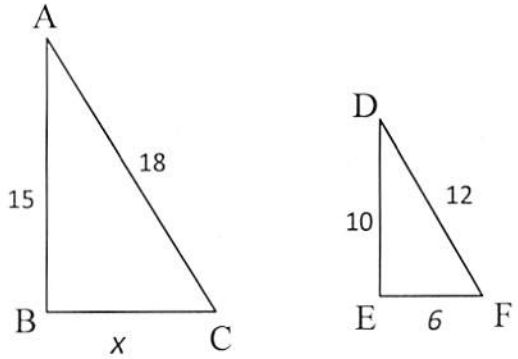
a) $10x + 3 = 85$
b) $3x - 10 = 85$
c) $10x - 85 = 3$
d) $3x + 10 = 85$

7) Solve for X to determine how much time she spent on each car above. Use the equation you chose in #6.

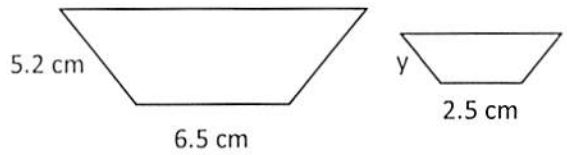
Similar Figures & Proportions Name _____ Per. _

Directions: For each pair of similar figures, ***write a proportion*** containing the unknown length. ***Then solve***.

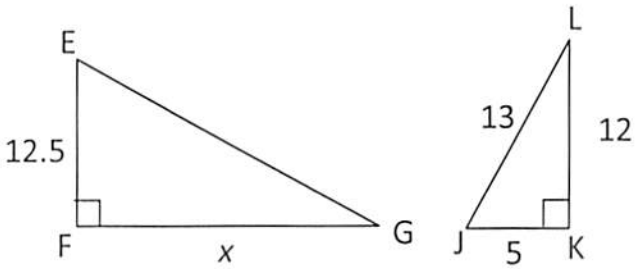
1. $\Delta ABC \sim \Delta DEF$ Show your proportion and work:



2. The following trapezoids are similar. Show your proportion and work:
Find the length of side y.



3. The figures are similar. Solve for x. Show your proportion and work:



4. In problem number 3, what is the scale factor from the smaller figure to the larger one?

5. A Palm tree casts a shadow that is 28 feet long. A 6 foot sign casts a shadow 8 feet long.
How tall is the palm tree? Label the diagram, set up a proportion, and solve.