NAME_____**DATE**_____**PER.**_____

MORE SIMILAR POLYGONS

5 POINTS EACH

1. a)$\angle A \cong$ _____

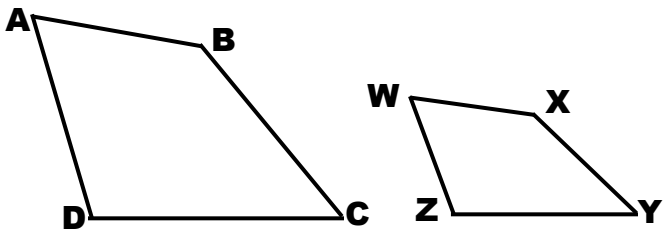
   b)$\angle B \cong$ _____

   c)$\angle C \cong$ _____

   d)$\angle D \cong$ _____

   e) $\frac{AB}{\quad} = \frac{\quad}{ZY} = \frac{BC}{\quad}$

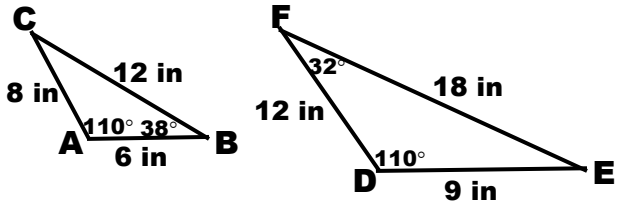
ABCD ~ WXYZ below. Use these figures to answer the questions.



2. YES or NO

   Explain:

Are the two triangles shown below similar?



3. _____ What is the common ratio of ΔFDE to ΔCAB in problem #2?

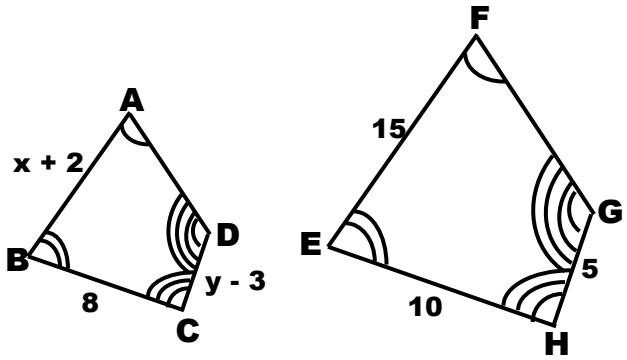
4. _____ What is the ratio of the perimeter of ΔFDE to ΔCAB?

5. _____ How does the common ratio and ratio of the perimeters of ΔFDE to ΔCAB compare?

For each of the following, each pair of polygons is similar. Find the values of 'x' and 'y'.

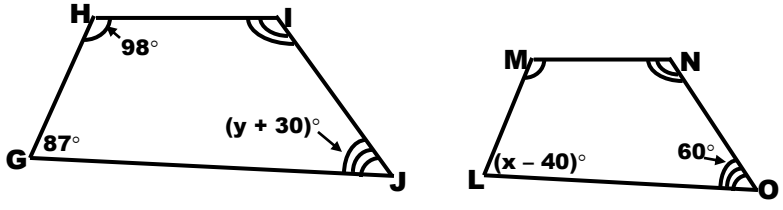
6. x = _____

   y = _____



7. x = _____

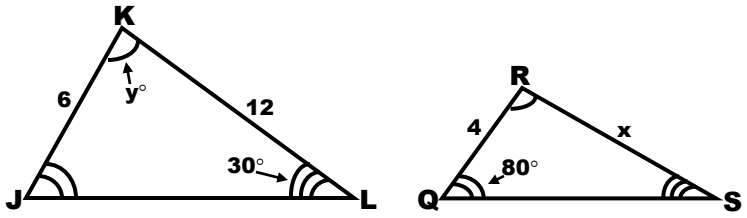
   y = _____



5 POINTS EACH

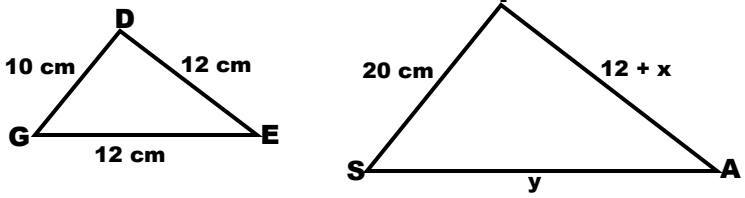
8. x = _____

   y = _____



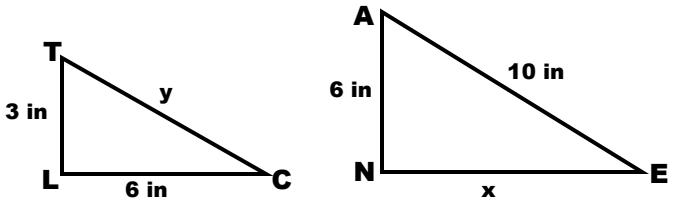
9. x = _____

   y = _____



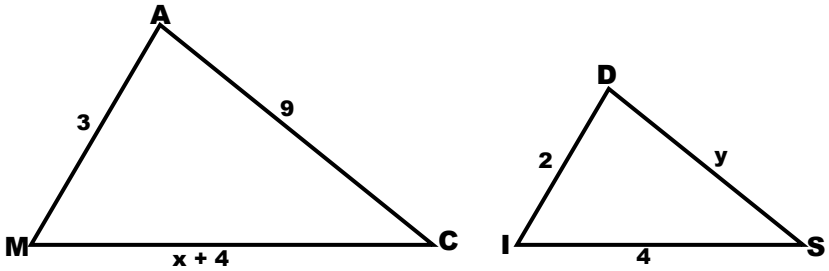
10. x = _____

    y = _____



11. x = _____

    y = _____



Solve each of the following.

12. Measures (6):

The sum of the measures of the interior angles of a hexagon is 720°. The measures of the angles of a particular hexagon are in the ratio 4:5:5:8:9:9. What are the measure of these angles?

13. Measures (2):

The ratio of the measure of two complementary angles is 4:5. What are the measures of the angles?

REVIEW PROBLEMS
Solve for 'x' in each of the following.

5 POINTS EACH

14. x = _____	$\frac{2x-7}{9} = \frac{12-7x}{6}$

Set up a proportion and solve.

15. _____	Recall that the slope of a line is a ratio of the rise to the run. If a line has a slope of $\frac{3}{5}$, and you have chosen two points on the line that have a rise of 15, what is the run?

TAKS PRACTICE
Find the correct answer for each of the following. Clearly circle/bubble in your answer where appropriate. *Work must be shown in order to receive credit*.

16. Which of the following statements is true?

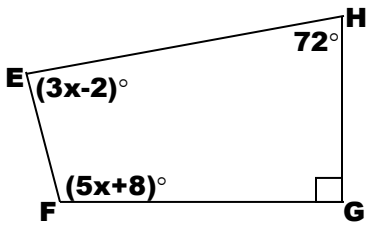
    A. If two figures are similar, then they are congruent.

    B. If two figures are congruent, then they are similar.

    C. If two figures are similar, then their corresponding sides have the same length.

    D. Not Here

17. What is the measure of ∠E in the figure below?



    A. 24°
    B. 70°
    C. 128°
    D. 108°

18. The angles of a triangle are in the ratio of 5:6:9. What is the degree measure of the largest angle of the triangle?

    Record your answer and fill in the bubbles on the grid below. Be sure to use the correct place value.

				.			
⓪	⓪	⓪	⓪		⓪	⓪	⓪
①	①	①	①		①	①	①
②	②	②	②		②	②	②
③	③	③	③		③	③	③
④	④	④	④		④	④	④
⑤	⑤	⑤	⑤		⑤	⑤	⑤
⑥	⑥	⑥	⑥		⑥	⑥	⑥
⑦	⑦	⑦	⑦		⑦	⑦	⑦
⑧	⑧	⑧	⑧		⑧	⑧	⑧
⑨	⑨	⑨	⑨		⑨	⑨	⑨