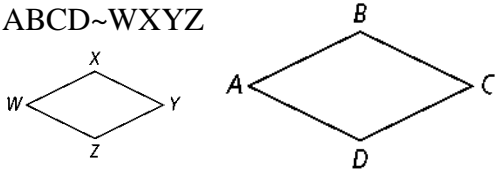
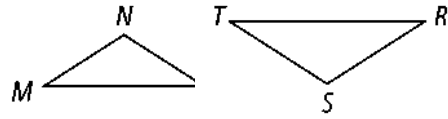


**A. List the pairs of congruent angles and the extended proportion that relates the corresponding sides for the similar polygons.**

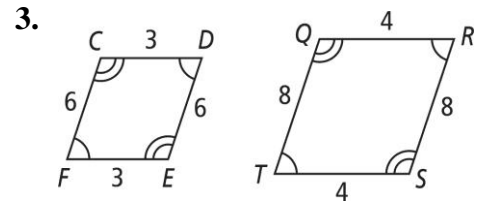
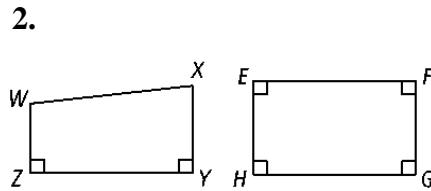
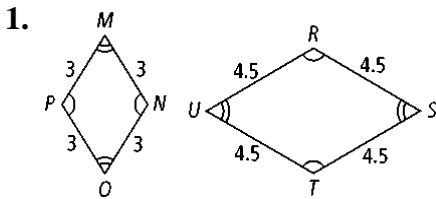
1.  $ABCD \sim WXYZ$



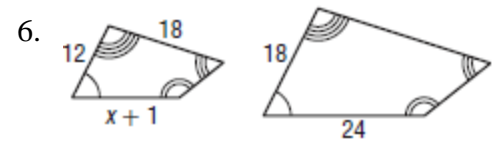
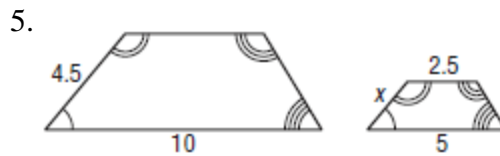
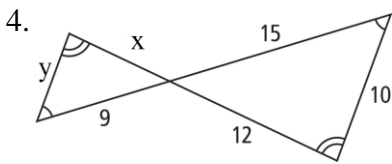
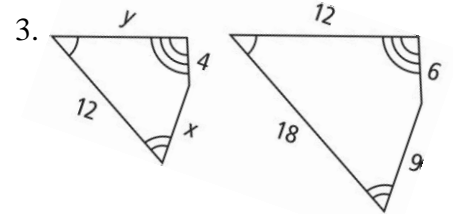
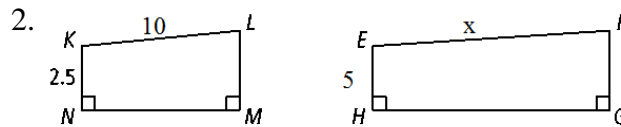
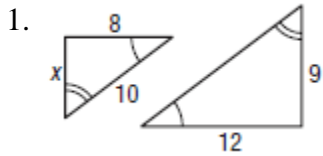
2.  $MNO \sim RST$



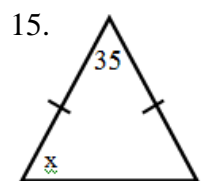
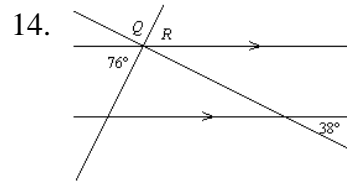
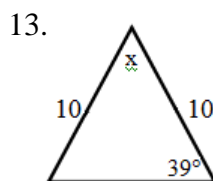
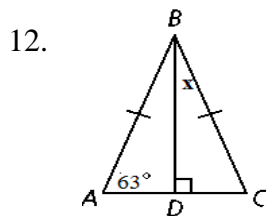
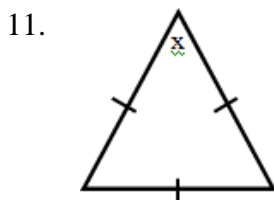
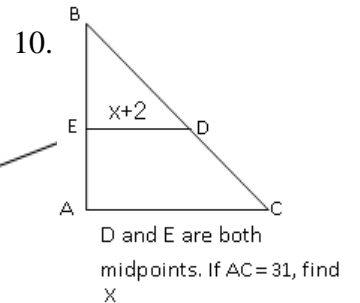
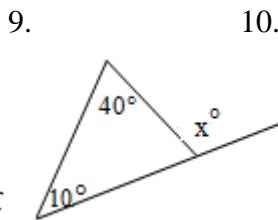
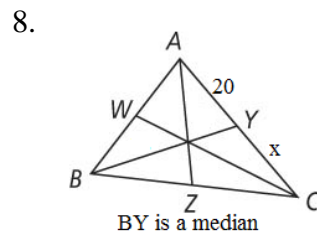
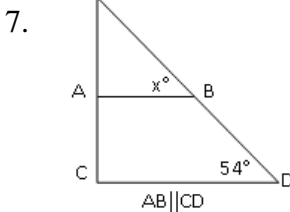
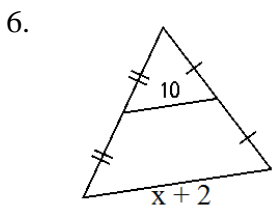
**B. Determine whether the polygons are similar. If so, write a similarity statement and give the scale factor. If not, explain.**



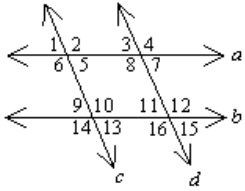
**C. The polygons are similar. Find the value of  $x$  and  $y$**



**D. Find the variables**



E. Which of the following statements would prove lines are parallel, if so state the lines and why



1. YN  $\angle 11 \cong \angle 15$  \_\_\_\_\_
2. YN  $\angle 11 \cong \angle 7$  \_\_\_\_\_
3. YN  $\angle 13 \cong \angle 1$  \_\_\_\_\_
4. YN  $\angle 6 + \angle 5 = 180$  \_\_\_\_\_
5. YN  $\angle 8 + \angle 5 = 180$  \_\_\_\_\_
6. YN  $\angle 1 \cong \angle 9$  \_\_\_\_\_

F. indicate, yes or no, whether the 3 sides or 3 angles create a triangle. Explain why or why not

- |           |                           |           |                          |           |                          |
|-----------|---------------------------|-----------|--------------------------|-----------|--------------------------|
| 1. a = 14 | 2. $\angle A = 100^\circ$ | 3. x = 10 | 4. $\angle S = 55^\circ$ | 5. p = 20 | 6. $\angle R = 75^\circ$ |
| b = 5     | $\angle B = 35^\circ$     | y = 25    | $\angle U = 40^\circ$    | d = 50    | $\angle A = 45^\circ$    |
| c = 12    | $\angle C = 45^\circ$     | z = 19    | $\angle N = 75^\circ$    | q = 25    | $\angle T = 60^\circ$    |

G. List the angles and sides from smallest to largest

- 1.
- 2.
- 3.
- 4.

H – Determine If the two triangles are congruent. Write a congruency statement and the postulate

- 1.
- 2.
- 3.
- 4.
- 5.

I. Which two triangles in each grouping are congruent. Write the postulate that proves it.

- 1.
- 2.
- 3.

J. Find the value of x

- 1.
- 2.
- 3.