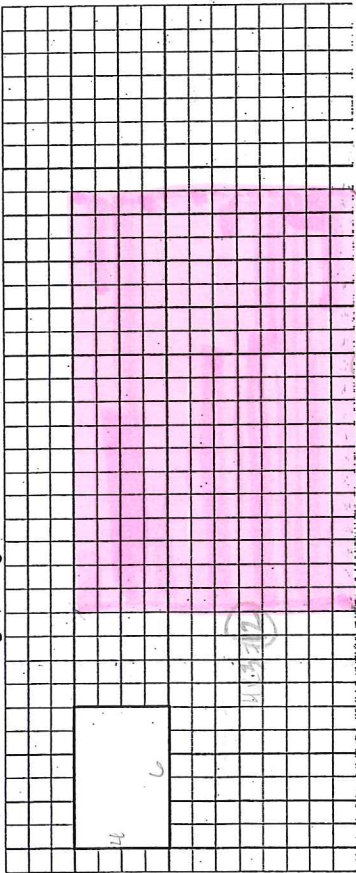


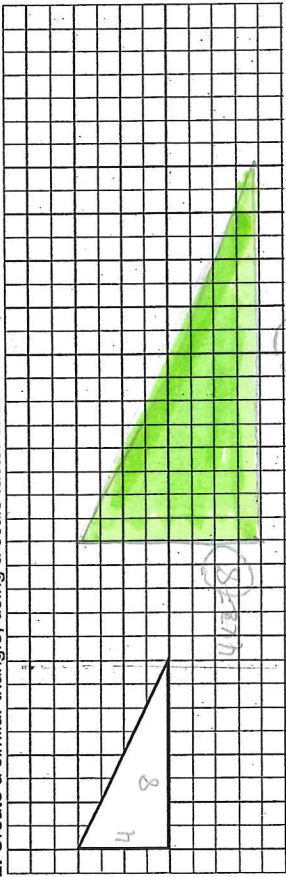
Drawing Similar Figures - Homework

DIRECTIONS: Follow each set of directions to create a similar figure.

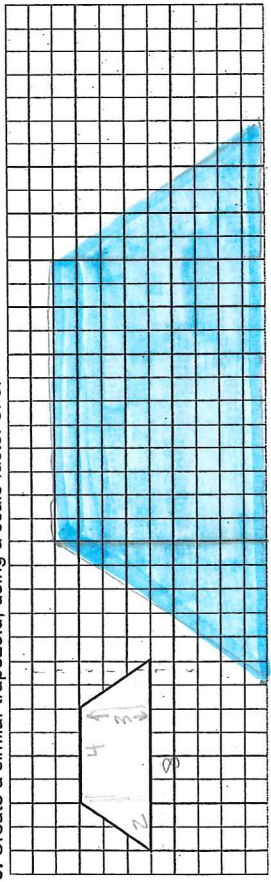
1. Create a similar rectangle, using a scale factor of 3.



2. Create a similar triangle, using a scale factor of 2.



3. Create a similar trapezoid, using a scale factor of 3.



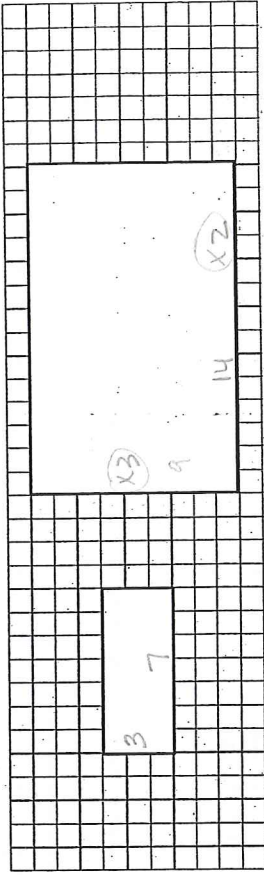
4. A rectangle is drawn with a length of 6 inches and a width of 4 inches. Which of the following is NOT a similar rectangle?

- A. 12 inches by 8 inches $\times 2$
- B. 24 inches by 16 inches $\times 4$
- C. 36 inches by 20 inches $\times 6$ and $\times 5$
- D. 18 inches by 12 inches $\times 3$

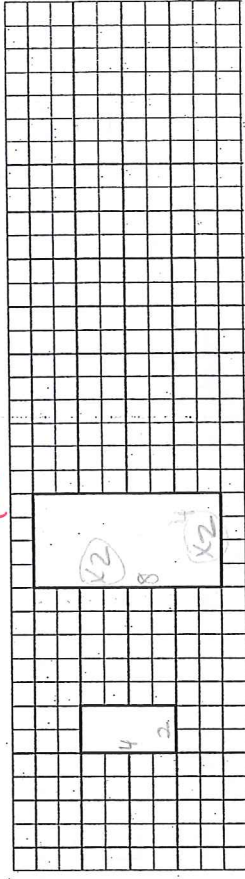
5. A triangle is drawn with side lengths of 2 feet, 5 feet, and 6 feet. Which of the following are the side lengths of a similar triangle?

- A. 4 feet, 10 feet, and 12 feet $\times 2$
- B. 6 feet, 12 feet, and 18 feet
- C. 20 feet, 50 feet, and 70 feet
- D. 12 feet, 35 feet, and 60 feet

6. Are the two rectangles similar? no If so, state the scale factor. _____



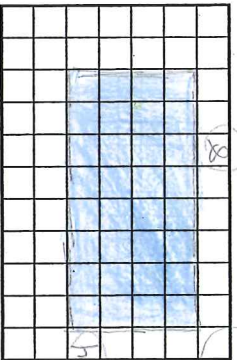
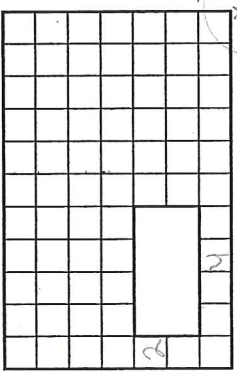
7. Are the two rectangles similar? yes If so, state the scale factor. 3



Drawing Similar Figures *Classwork*

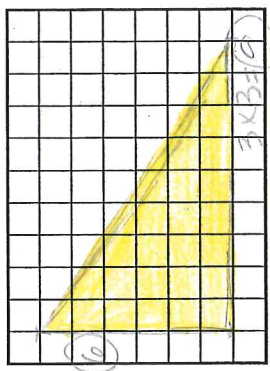
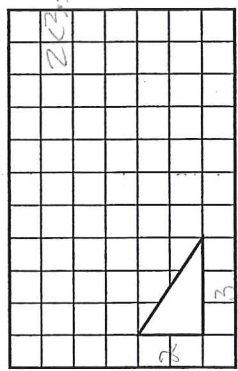
Follow each set of directions to create a similar figure.

Draw a new rectangle with side lengths twice as long.



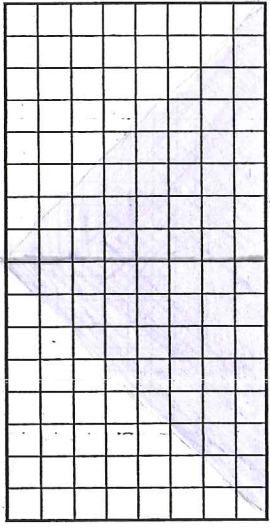
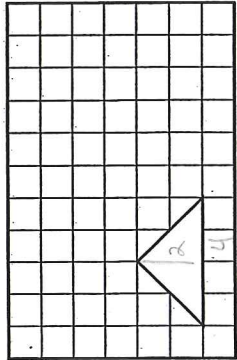
These rectangles are similar because each side length has been multiplied by a scale factor of 2.

Draw a new triangle with side lengths three times as long.



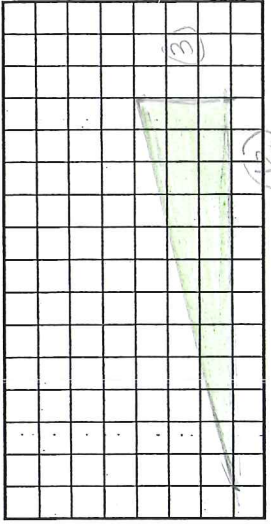
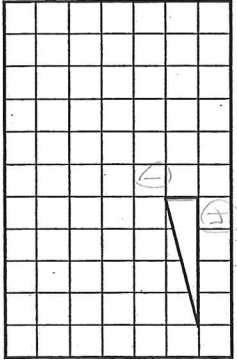
These triangles are similar because each side length has been multiplied by a scale factor of 3.

Draw a new triangle with side lengths four times as long. (Hint: Draw the base of the triangle four times as long, then draw the height of the triangle four times as tall. Lastly, use a straight edge to draw in the diagonals for the sides of your triangle.)



These triangles are similar because each side length has been multiplied by a scale factor of 4.

Draw a new triangle with side lengths three times as long.



These triangles are similar because each side length has been multiplied by a scale factor of 3.

The lengths of the sides of a triangle are 10 feet, 10 feet, and 12 feet. What would be the side lengths of a similar triangle that was created using a scale factor of 3.

30 ft, 30 ft, and 36 ft

The rectangle measures 8 inches by 5 inches. What would be the length and width of a similar rectangle that was created using a scale factor of 6.

48 in and 30 in