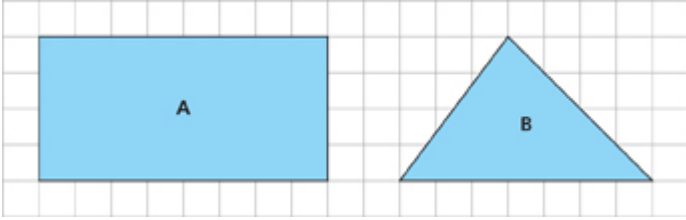


Name \_\_\_\_\_

Class Color \_\_\_\_\_



**Part A** For each part, draw a rectangle similar to Rectangle A that fits the given description. Use a separate sheet of graph paper. Explain your reasoning.

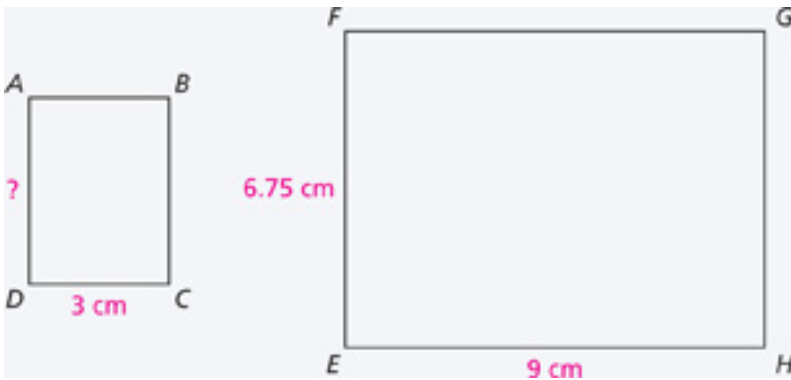
1. The scale factor from Rectangle A to the new rectangle is 2.5.
2. The area of the new rectangle is  $\frac{1}{4}$  the area of Rectangle A.
3. The perimeter of the new rectangle is three times the perimeter of Rectangle A

**Part B** For each part, draw a triangle similar to Triangle B that fits the given description. Use a separate sheet of graph paper. Explain your reasoning.

1. The area of the new triangle is 16 times the area of Triangle B.
2. The scale factor from Triangle B to the new triangle is  $\frac{1}{2}$

### Part C

1. Rectangles ABCD and EFGH are similar. Find the length of side AD. Explain how you found the length.



2. Triangles ABC and DEF are similar. Find the missing side lengths and angle measures. Explain.

