

Name _____ Date _____

**Skills Maintenance****Writing Proportions****Activity 1**

Find the value of the variable in the proportions.

1. $\frac{4}{6} = \frac{x}{3}$ $x =$ _____

2. $\frac{2}{3} = \frac{10}{y}$ $y =$ _____


3. $\frac{1}{a} = \frac{5}{30}$ $a =$ _____

4. $\frac{w}{3} = \frac{6}{9}$ $w =$ _____



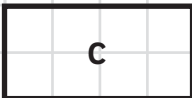
5. $\frac{3}{4} = \frac{6}{z}$ $z =$ _____


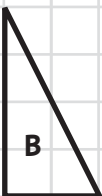

6. $\frac{3}{m} = \frac{15}{35}$ $m =$ _____



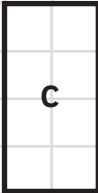
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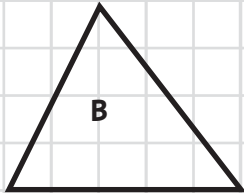

 **Problem-Solving Activity**
Proportions and Geometry

Circle the two similar shapes in each set of three shapes.


1.   

2.   

3.   

4.   

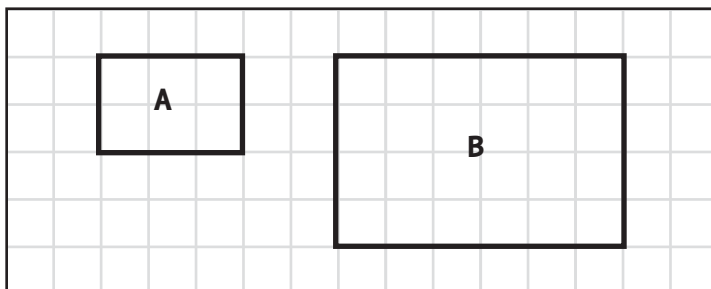
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 **Problem-Solving Activity**
Proportions and Geometry

Find the dimensions of the shapes. Write proportions that prove each pair of shapes is similar. Then tell what the scaling factor is.

Unit 2

Problem 1



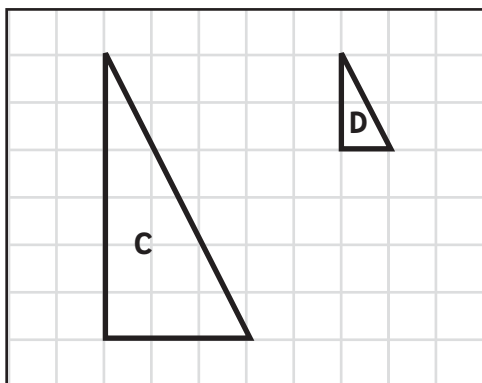
The dimensions of A are → base _____ height _____

The dimensions of B are → base _____ height _____

Write a proportion about the dimensions of the two shapes that proves they are similar.

$$\frac{\text{Base}}{\text{Height}} \quad \text{A} \quad = \quad \text{B} \quad \text{What is the scaling factor?}$$

Problem 2



The dimensions of C are → base _____ height _____

The dimensions of D are → base _____ height _____

Write a proportion about the dimensions of the two shapes that proves they are similar.

$$\frac{\text{Base}}{\text{Height}} \quad \text{C} \quad = \quad \text{D} \quad \text{What is the scaling factor?}$$

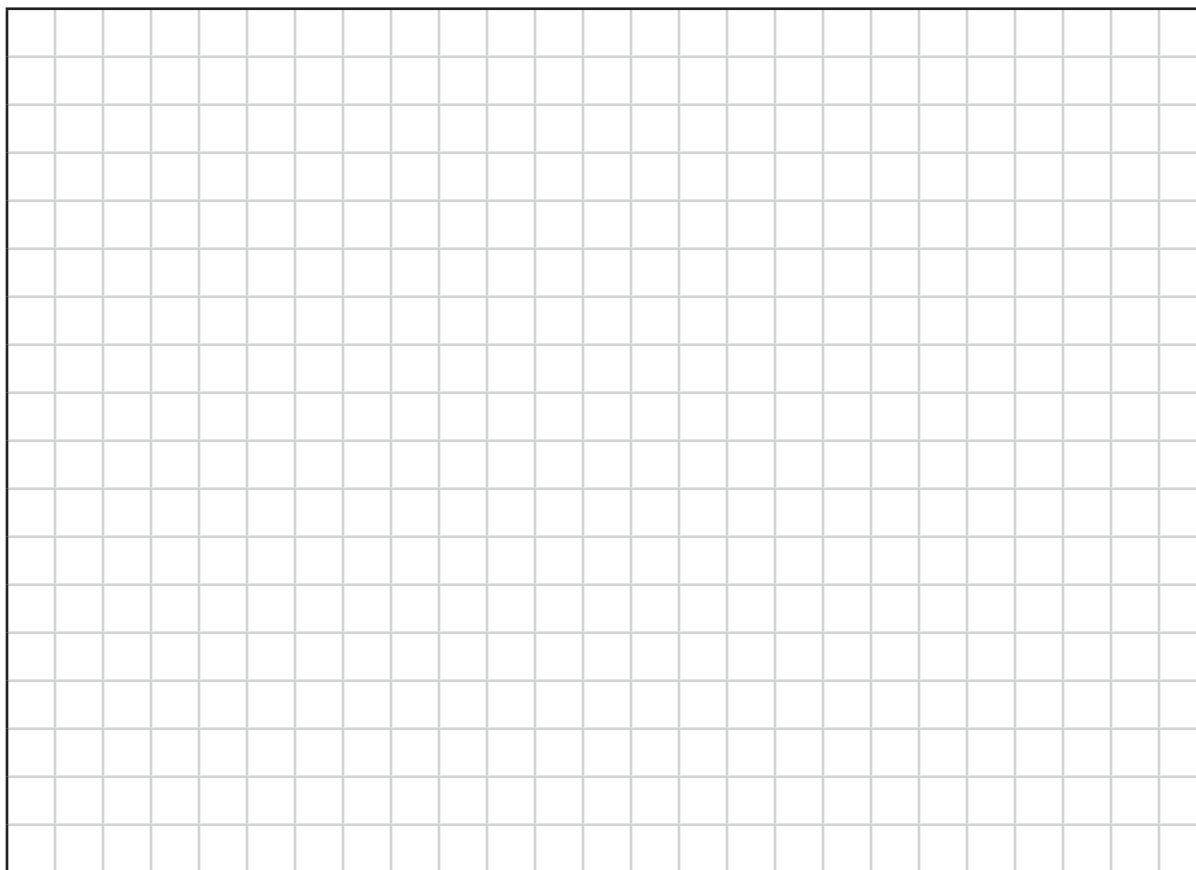
Name _____ Date _____



Problem-Solving Activity

Using Proportions in Geometry

Now it is your turn to make similar shapes. Use the grid paper and draw the first shape, A. Draw a second shape, B, which is similar to A. Write the proportion. What is the scaling factor? Draw another shape, C, that is proportional to A. Write the proportion. What is the scaling factor you used for this shape?



- Write the proportion showing that Shapes A and B are similar.

$$\frac{\text{Base}}{\text{Height}} \quad \text{Shape A} \quad = \quad \text{Shape B} \quad \text{What scaling factor did you use? } \underline{\hspace{2cm}}$$

- Write the proportion showing that Shapes A and C are similar.

$$\frac{\text{Base}}{\text{Height}} \quad \text{Shape A} \quad = \quad \text{Shape C} \quad \text{What scaling factor did you use? } \underline{\hspace{2cm}}$$