

Name:

### 3.1.1 Homework

- Plot triangle  $ABC$  formed with the points  $A(0, 0)$ ,  $B(3, 4)$ , and  $C(3, 0)$ , on graph paper.
  - Dilate triangle  $ABC$  from the origin by a scale factor of 2 to form triangle  $A'B'C'$ .
  - What are the side lengths of the original triangle?
  - What are the side lengths of the image triangle?
  - Find the area of triangle  $A'B'C'$ .

2. Solve each equation below for  $x$ .

a.  $\frac{x}{3} = 6$

b.  $\frac{5x+9}{2} = 12$

c.  $\frac{x}{4} = \frac{9}{6}$

d.  $\frac{5}{x} = \frac{20}{8}$

3. Examine each diagram below. Identify the error in each diagram.

