



Name :

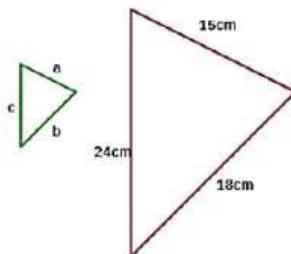
Grade

### Investigate Reductions and Enlargements

**Learning Objective :** Understand the image that is the result of enlarging or reducing a preimage is not congruent to the preimage.

The green triangle is enlarged 3 times into the red triangle.

Find the lengths  $a$ ,  $b$ , and  $c$ .



$a = 6 \text{ cm}$   $b = 5 \text{ cm}$  and  $c = 8 \text{ cm}$

$a = 5 \text{ cm}$   $b = 6 \text{ cm}$  and  $c = 8 \text{ cm}$

$a = 8 \text{ cm}$   $b = 6 \text{ cm}$  and  $c = 5 \text{ cm}$

$a = 5 \text{ cm}$   $b = 8 \text{ cm}$  and  $c = 6 \text{ cm}$

An equilateral triangle  $ABC$  of side 8 cm is reduced by half into triangle  $A'B'C'$ .

Select the sentence that best describes the triangle  $A'B'C'$ .

$A'B' = 4 \text{ cm}$  and each angle  $= 30^\circ$

$A'B' = 16 \text{ cm}$  and each angle  $= 60^\circ$

$A'B' = 4 \text{ cm}$  and each angle  $= 120^\circ$

$A'B' = 4 \text{ cm}$  and each angle  $= 60^\circ$

Ray uses a magnifying glass to read small printed text.

This is \_\_\_\_\_.



a translation

a rotation

a reflection

an enlargement