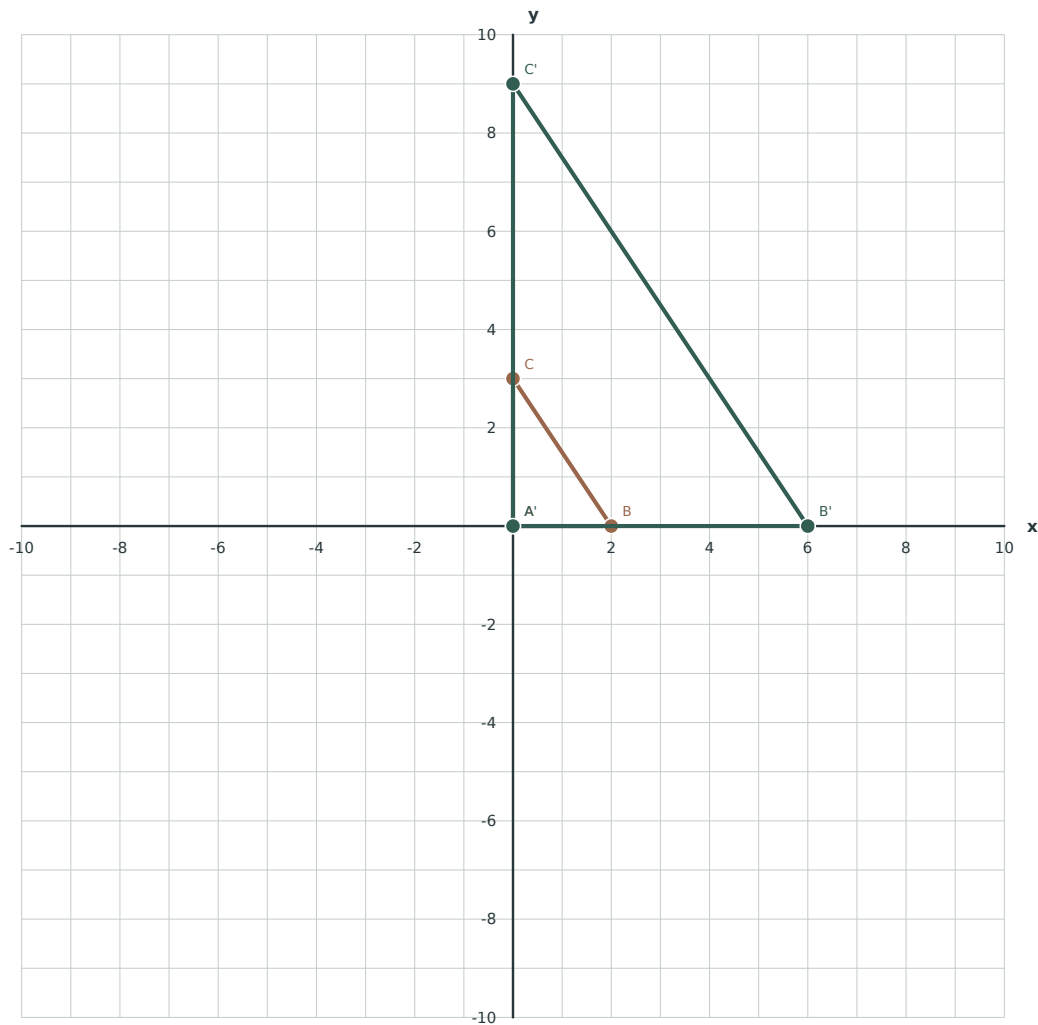


Triple a triangle

Vertices in order: $A(0, 0)$; $B(2, 0)$; $C(0, 3)$.

Dilate about $(0, 0)$ by scale factor 3. Draw and label the image. State the length and area ratios.

ANSWER / worked construction



Brown: original / Green: transformed image (answer only)

Dilate about $(0, 0)$ by scale factor 3.

Image vertices: $A(0, 0)$; $B(6, 0)$; $C(0, 9)$.

Length ratio = 3; area ratio = 9. Area: 3 to 27 square units.