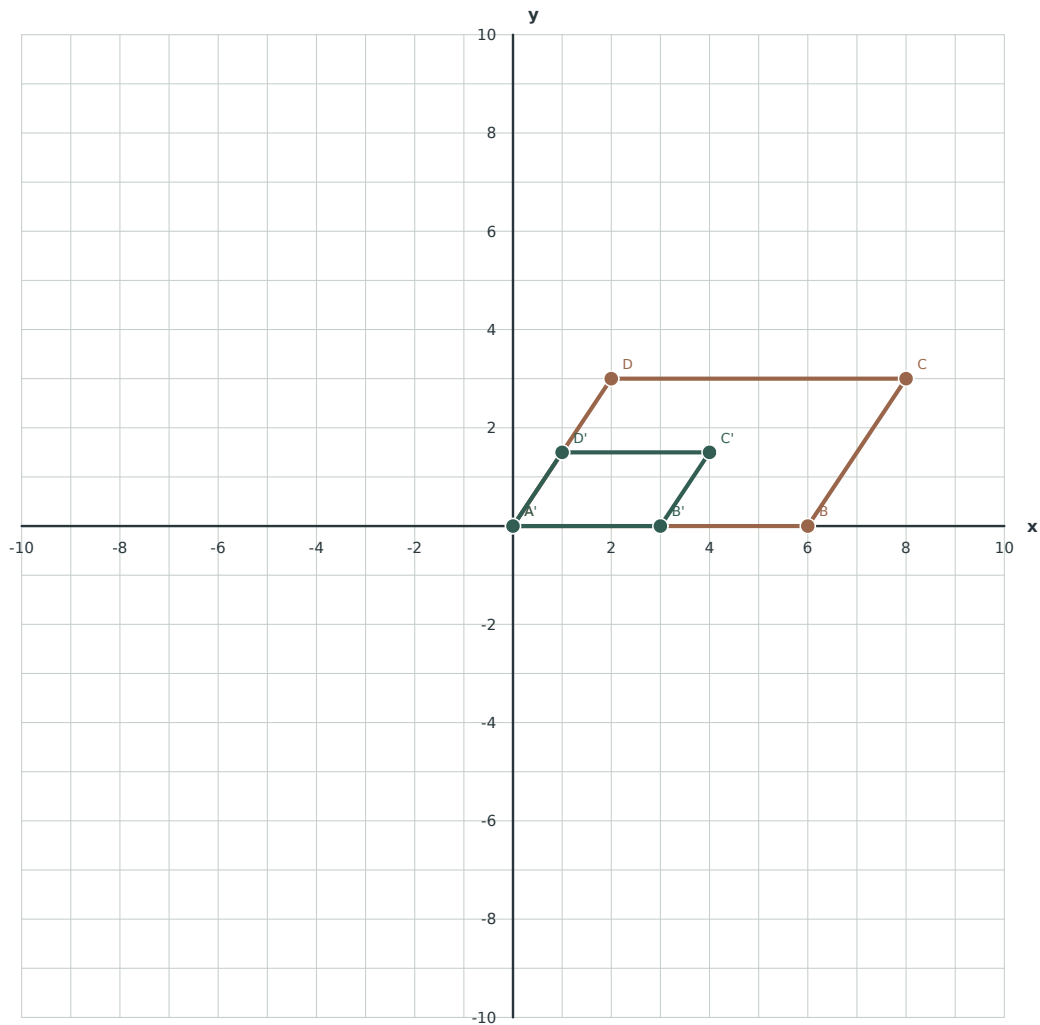


Half-size parallelogram

Vertices in order: A(0, 0); B(6, 0); C(8, 3); D(2, 3).

Dilate about (0, 0) by scale factor $1/2$. 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 $1/2$.

Image vertices: A(0, 0); B(3, 0); C(4, $3/2$); D(1, $3/2$).

Length ratio = $1/2$; area ratio = $1/4$. Area: 18 to $9/2$ square units.