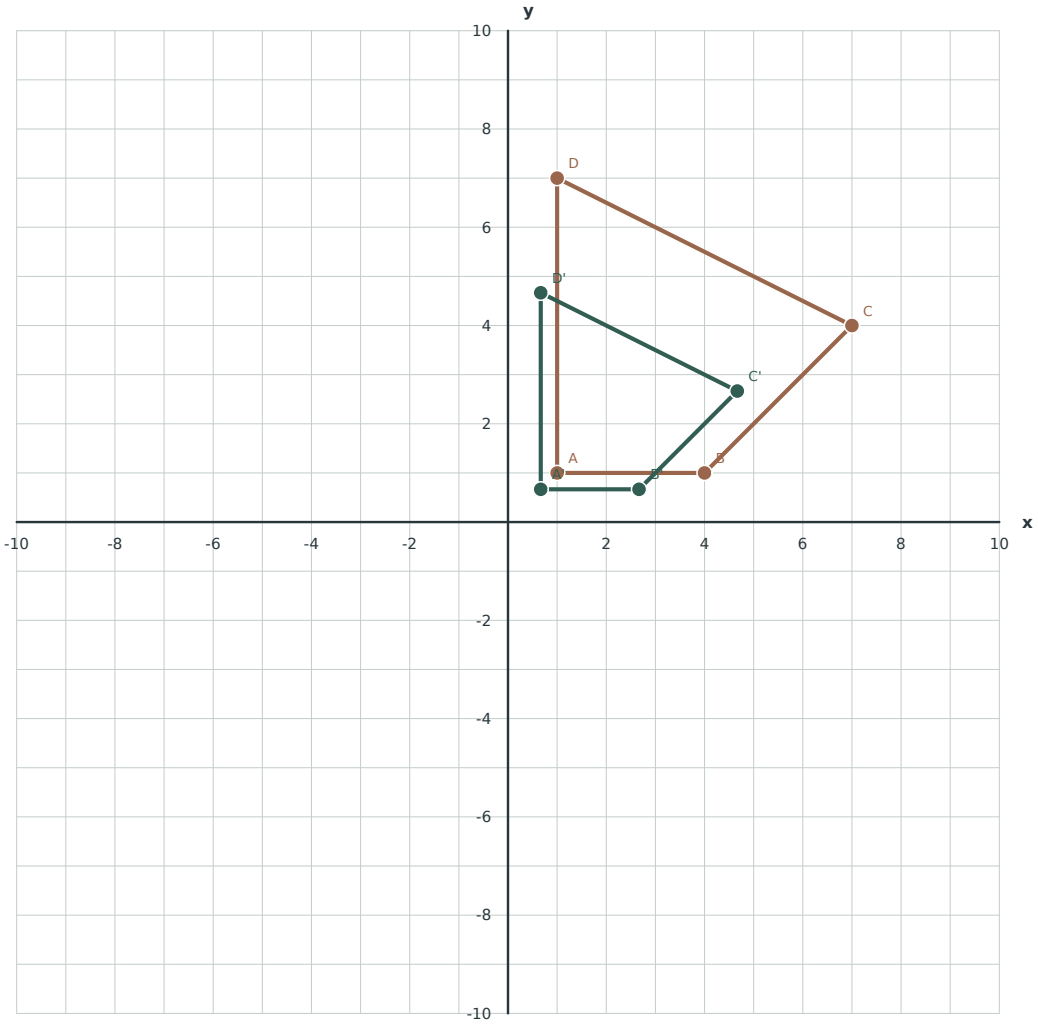
Two-thirds quadrilateral

Vertices in order: A(1, 1); B(4, 1); C(7, 4); D(1, 7).

Dilate about (0, 0) by scale factor 2/3. 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 2/3.

Image vertices: A(2/3, 2/3); B(8/3, 2/3); C(14/3, 8/3); D(2/3, 14/3).

Length ratio = 2/3; area ratio = 4/9. Area: 45/2 to 10 square units.

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