



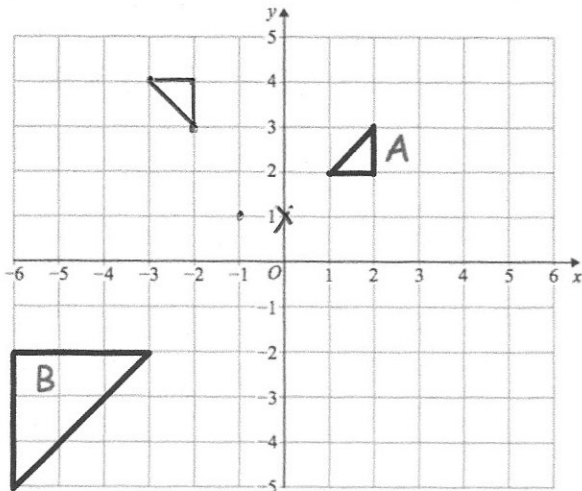
Make w the subject of $a + 2w^3 = s$

$$2w^3 = s - a$$

$$w^3 = \frac{s-a}{2}$$

$$w = \sqrt[3]{\frac{s-a}{2}}$$

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Rotate triangle A 90° anticlockwise about the point $(-1, 1)$

Describe fully the single transformation that takes shape A to shape B.

Enlargement

Scale factor -3

Centre of enlargement $(0, 1)$

Simplify fully

$$\frac{x^2 + 6x + 8}{2x + 8}$$

$$\frac{(x+4)(x+2)}{2(x+4)}$$

$$\frac{x+2}{2}$$

Simplify

$$\frac{(3^6)^5}{9 \times 3^7}$$

$$3^2$$

$$\frac{3^{30}}{3^9} = 3^{21}$$

Give your answer as a power of 3.