

1st April

Corbettmaths

A circle has centre $(7, 2)$ and radius 5.

Write down the equation of the circle

$$f(x) = x^2 - 8 \quad \text{for all values of } x$$

$$g(x) = 6 - 7x \quad \text{for all values of } x$$

Work out the range of $f(x)$

Solve $f(x) = 4g(x)$

Give each answer to 1 decimal place.

The unit square OABC is transformed by a reflection in the y-axis followed by enlargement scale factor 3, centre the origin.

What is the matrix of the combined transformation?