

Substituting into functions

A LEVEL LINKS

Scheme of work: 1b. Quadratic functions – factorising, solving, graphs and the discriminants

Practice questions

1. f and g are functions such that

$$f(x) = \frac{2}{x^2} \quad \text{and} \quad g(x) = 4x^2$$

(a) Find $f(-5)$

(b) Find the value of x for which $f(x) = g(x)$.

2. The function $f(x) = 3x^2 - 2x - 8$

Express $f(x + 2)$ in the form $ax^2 + bx$

Answers

1. (a) $\frac{2}{25}$

(b) $x = \pm 1$

2. $3x^2 + 10x$