

4. The functions f and g are defined by

$$f(x) = 3x^2 - 2 \quad x \in \mathbb{R}$$

$$g(x) = \frac{5x - 1}{x - 4} \quad x \in \mathbb{R} \quad x \neq 4$$

(a) State the range of f

(1)

(b) Find $gf(2)$

(2)

(c) Find $g^{-1}(x)$

(2)