

12 $f(x) = 3 - 2x$ $g(x) = x^2 + 5$ $h(x) = x^3$

(a) Find $f(-5)$.

..... [1]

(b) Find $ff(x)$.
Give your answer in its simplest form.

..... [2]

(c) Solve $g(x) = f(x) + 37$.

$x = \dots\dots\dots$ or $x = \dots\dots\dots$ [4]

(d) Find $f^{-1}(x)$.

$$f^{-1}(x) = \dots\dots\dots [2]$$

(e) Find $hf(x) + g(x)$.
Give your answer in its simplest form.

$$\dots\dots\dots [5]$$