3 $$\mathrm{f}(x) = 1 + 4x \qquad \mathrm{g}(x) = x^2$$

(a) Find

(i) gf(3),

.... [2]

(ii) fg(x),

.... [1]

(iii) $\mathrm{f}^{-1}\mathrm{f}(x)$.

.... [1]

(b) Find the value of x when $\mathrm{f}(x) = 15$.

$x =$ .... [2]

 [Turn over