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$f(x) = 5^x$

$g(x) = 3x - 2$

$h(x) = x^2 + 1$

(a) Find  $f(5)$ .

..... [1]

(b) Find  $g(8x)$ .

..... [1]

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

$g^{-1}(x) =$  ..... [2]

(d) Find the positive solution of  $gh(x) = 364$ .

$x =$  ..... [3]

(e) Find  $ff^{-1}(12)$ .

..... [1]