

# Introduction to Functions

Solve the clues to find the four-digit code to escape the classroom!

a. The function  $f$  is given by  $f(x) = 3x - 1$ .  
Work out the value of  $f(7)$ .

b. The function  $g$  is given by  $g(x) = 2(x + 5)$ .  
Work out the value of  $g(-1)$ .

c. The function  $h$  is given by  $h(x) = 5 - 8x$ .  
If  $h(a) = 1$ , work out the value of  $a$ .  
Give your answer as a decimal.

d.  $f(x) = x^2$   
 $g(x) = 3 - 2x$   
Solve  $f(x) = g(x)$ .  
There are two possibilities.

The code is given by the tens digit in the answer to part a, the answer to part b, the tenths digit in the answer to part c and the positive answer to part d.

$f(x)$



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# Answers

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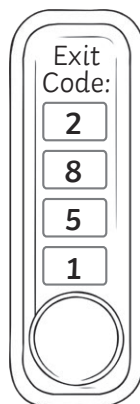
b. The function  $g$  is given by  $g(x) = 2(x + 5)$ .  
Work out the value of  $g(-1)$ . **8**

c. The function  $h$  is given by  $h(x) = 5 - 8x$ .  
If  $h(a) = 1$ , work out the value of  $a$ .  
Give your answer as a decimal. **0.5**

d.  $f(x) = x^2$   
 $g(x) = 3 - 2x$   
Solve  $f(x) = g(x)$ .  
There are two possibilities.  **$x = 1$  or  $x = -3$**

The code is given by the tens digit in the answer to part a, the answer to part b, the tenths digit in the answer to part c and the positive answer to part d.

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