



Scan for the solutions

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1 $f(x) = 2x + 3$

Work out

a. $f(4)$

b. $f(-2)$

(2 marks)

Answer _____

2 $f(x) = 3x - 4$ $g(x) = x^2$

a. Find $f(5)$

b. Find $gf(2)$

(3 marks)

Answer _____

3 $g(x) = x^2 - 5$

a. Work out $g(3)$.

b. Work out $g(-4)$.

c. Find the two values of x for which $g(x) = 20$.

(3 marks)

Answer _____

4 $f(x) = 3x - 1$

Complete the table of values.

x	-2	0	1	4
$f(x)$				

(2 marks)

Answer _____

5 $f(x) = 2x + 5$

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

b. Find $f^{-1}(11)$

(3 marks)

Answer _____

6 $f(x) = 4x + 9$

a. Solve $f(x) = -7$.

b. Solve $f(x) = x$.

(4 marks)

Answer _____

7 $f(x) = \frac{2x - 1}{3}$

a. The output of the function is 5. Find the input.

b. The output of the function is -3. Find the input.

(3 marks)

Answer _____

8 $f(x) = x^2 + 2x$

Express $f(x + 3)$ in the form $x^2 + bx + c$ where b and c are integers.

(3 marks)

Answer _____

9 $f(x) = x^2 + 2x$

a. Work out $f(3) + f(-1)$.

b. Write $f(2x)$ in terms of x . Give your answer in its simplest form.

(4 marks)

Answer _____

10 $f(x) = 3x - 4$

a. Show that $f(x + 2) - f(x) = 6$ for every value of x .

b. Solve $f(2x) = f(x + 5)$.

(4 marks)

Answer _____

End of questions | Total 31 marks