



SCAN ME

Inverse Functions



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REVISE THIS TOPIC

CHECK YOUR ANSWERS

1 $f(x) = 2x + 9$ $g(x) = \sqrt{x - 3}$ $h(x) = x^3 + 4$

1 (a) Work out $f^{-1}(x)$ [2 marks]



$f^{-1}(x) =$ _____

1 (b) Work out $g^{-1}(x)$ [2 marks]



$g^{-1}(x) =$ _____

1 (c) Work out $h^{-1}(31)$ [2 marks]



Answer _____





2 $f(x) = \frac{2x + 3}{4}$ $g(x) = x^2 - 6$

2 (a) Work out $f^{-1}(x)$ [2 marks]



$f^{-1}(x) =$ _____

2 (b) Work out $g^{-1}(x)$ [2 marks]



$g^{-1}(x) =$ _____

3 $f(x) = 50 - x^2$ $g(x) = 4x^2 - 1$

3 (a) Work out $f^{-1}(1)$ [2 marks]



Answer _____

3 (b) Work out $g^{-1}(0)$ [2 marks]



Answer _____





4 $f(x) = \frac{2x^2}{5}$ $g(x) = \frac{x}{4} - 3$

4 (a) Work out $f^{-1}(x)$ [2 marks]



$f^{-1}(x) =$ _____

4 (b) Work out $g^{-1}(x)$ [2 marks]



$g^{-1}(x) =$ _____

5 $f(x) = \sqrt[3]{100 - x}$ $g(x) = 2(x + 14)$

5 (a) Work out $f^{-1}(4)$ [2 marks]



Answer _____

5 (b) Work out $g^{-1}(26)$ [2 marks]



Answer _____

Turn over ►





6 $f(x) = \frac{5}{x+10}$ $g(x) = \sqrt{2x^3-3}$

6 (a) Work out $f^{-1}(x)$ [2 marks]



$f^{-1}(x) =$ _____

6 (b) Work out $g^{-1}(x)$ [2 marks]



$g^{-1}(x) =$ _____

7 $f(x) = 3 - \frac{2}{x}$ $g(x) = (x-5)^3$

7 (a) Work out $f^{-1}(2.5)$ [2 marks]



Answer _____

7 (b) Work out $g^{-1}(-27)$ [2 marks]



Answer _____





8 $f(x) = \frac{x+4}{x-3}$ $g(x) = \sqrt{3x}$ $h(x) = 2x + 1$

8 (a) Work out $f^{-1}(x)$ [3 marks]



$f^{-1}(x) =$ _____

8 (b) Work out $g^{-1}(9)$ [2 marks]



Answer _____

8 (c) $k(x) = gh(x)$
Work out $k^{-1}(x)$ [4 marks]



$k^{-1}(x) =$ _____

