HIGHER

7.9 Inverse and Composite Functions: 10-minute Pack

Total Marks

EDEXCEL 1MA1 · Calculator allowed · about 10 minutes

Name: _____ Date: ____ / ____ / _____

Answer ALL questions. Show all your working.

1 Work out g(3) for $g(x) = x^2 - 1$.

(Total for Question 1 is 1 mark)

---

2 Let $f(x) = x^2$ and $g(x) = x + 1$.
Find (g o f)(3).

(Total for Question 2 is 2 marks)

---

3 $f(x) = 5x - 2$ and $g(x) = -3x - 1$. Solve $fg(x) = 68$.

(Total for Question 3 is 3 marks)

---

4 $f(x) = 5x - 4$ and $g(x) = x^2 - 8$. Work out fg(-3).

(Total for Question 4 is 2 marks)

© Revision Library | revisionlibrary.co.uk

Mark scheme · 7.9 Inverse and Composite Functions: 10-minute Pack

Question 1

8 cao	**B1**

Answer: 8

Question 2

compute f(3)=9 then g(9)=9+1 or equivalent	**M1**
10 cao	**A1**

Answer: 10

Question 3

fg(x) = 5(-3x - 1) - 2	**M1**
-15x - 7 = 68 and attempts to solve	**M1**
x = -5	**A1**

Answer: x = -5

Question 4

g(-3) = 1	**M1**
1	**A1**

Answer: 1

© Revision Library | revisionlibrary.co.uk