EXPAND, FACTORISE AND SIMPLE ALGEBRA GCSE MATHS EDEXCEL PASTPAPER QUESTIONS – None Calculator

1.

(a) Simplify $3y + 2x - 4 + 5x + 7$

(1)

(b) Factorise $2x^2 - 4x$

(2)

(c) Expand and simplify $11 - 3(x+2)$

(2)

(d) Expand and simplify $(x-6)(3x+7)$

(2)

(Total for Question 2 is 7 marks)

2.

(a) Factorise $10a + 5$

....
                                                    (1)

(b) Expand and simplify $5(x + 7) + 3(x - 2)$

....
                                                    (2)

(c) Factorise completely $3a^2b + 6ab^2$

....
                                                    (2)

(Total for Question 6 is 5 marks)

3.

(a) Expand and simplify $(x + 5)(x - 8)$

....
                                                    (2)

(b) Factorise $x^2 - 16$

....
                                                    (1)

(Total for Question 12 is 3 marks)

4.

(a) Simplify $3e + 2f - e - 3f$

(2)

(b) Expand $2(3x + 5)$

(2)

(Total for Question 2 is 4 marks)

5.

(a) Expand and simplify $(2x + 1)(x + 3)$

(2)

(b) Factorise fully $4x^2 + 8xy$

(2)

(Total for Question 10 is 4 marks)

6.

(a) Expand and simplify $3(y-2) + 2(y+5)$

(2)

(b) Simplify $\dfrac{w^5}{w^3}$

(1)

(c) Factorise $5x + 20$

(1)

(Total for Question 7 is 4 marks)

7.

$p = n^3 - 5$
$n = 2$

Work out the value of p.

(Total for Question 2 is 2 marks)

8.

(a) Factorise $2ax - 2ay + bx - by$

....
(2)

(b) Expand and simplify $(n + 2)^2 + (n - 3)^2$

....
(3)

(Total for Question 12 is 5 marks)

9.

(a) Expand $3(x + 2)$

....

(2)

(b) Factorise completely $12\,x^3y - 18\,xy^2$

....

(2)

(c) Expand and simplify $(2x - 3)(x + 4)$

....

(2)

(d) Simplify $5x^4y^3 \times 2x^3y^2$

....

(2)

(Total for Question 11 is 8 marks)

10.

(a) Simplify $2e - 8f + 6e + 3f$

....

(2)

(b) Factorise $4t + 10$

....

(1)

(c) Expand and simplify $3 + 2(p - 1)$

....

(2)

(d) Factorise $ax + bx + ay + by$

....

(2)

(Total for Question 5 is 7 marks)