

GCSE Edexcel Math 1MA1 Factorizing Quadratics

Question Paper

"We will help you to achieve A Star"



Factorise
$$x^2 + 3x - 10$$

[2 marks]

Question 2

(a) (i) Factorise
$$x^2 - 12x + 27$$

(ii) Solve the equation
$$x^2 - 12x + 27 = 0$$

[3 marks]



Factorise
$$y^2 - 2y$$

[1 mark]

Question 4

Factorise
$$y^2 + 7y + 6$$

[2 marks]



Factorise

$$y^2 - 10y + 16$$

[2 marks]

Question 6

Factorise $x^2 - 49$

[1 mark]



Factorise $2p^2 - p - 10$

[2 marks]

Question 8

Factorise fully $8a^2 + 12a$

[2 marks]



Factorise
$$e^2 + e - 12$$

[2 marks]

Question 10

(b) Hence, or otherwise, simplify fully $(x^2 + 4)^2 - (x^2 - 2)^2$

[3 marks]

Question 11

Solve
$$x^2 = 4(x-3)^2$$

[3 marks]



Factorise completely $(12x - y)^2 - (4x - 3y)^2$

[2 marks]

Question 13

(a) Show that

$$(a^2 + 1)(c^2 + 1) = (ac - 1)^2 + (a + c)^2$$

[3 marks]



Simplify fully $(2x + 3)^2 - (2x - 3)^2$

[3 marks]

Question 15

Factorise fully $20x^2 - 5$

[2 marks]