



EXAM PAPERS PRACTICE

GCSE Edexcel Math
1MA1
Quadratic Formula

Question Paper

*"We will help you to
achieve A Star "*



Question 1

Solve $3x^2 - 4x - 2 = 0$

Give your solutions correct to 3 significant figures.

[3 marks]

Question 2

Solve the equation $3x^2 + 4x - 12 = 0$

Give your solutions correct to 2 decimal places.

[3 marks]

Question 3

Solve $3x^2 - x - 1 = 0$

Give your solutions correct to 2 decimal places.

[3 marks]



Question 4

Solve $x^2 - 5x + 3 = 0$

Give your solutions correct to 3 significant figures.

[3 marks]

Question 5

Solve $3x^2 + 2x - 7 = 0$

Give your solutions correct to 3 significant figures.
Show your working clearly.

[3 marks]

Question 6

Solve $3x^2 - 5x - 1 = 0$

Give your solutions correct to 3 significant figures.

[3 marks]



Question 7

Solve $3x^2 + 6x - 2 = 0$

Give your solutions correct to 2 decimal places.

[3 marks]

Question 8

Solve $2x^2 + 3x - 7 = 0$

Give your solutions correct to 2 decimal places.

[3 marks]



Question 9

The diagram shows a trapezium.

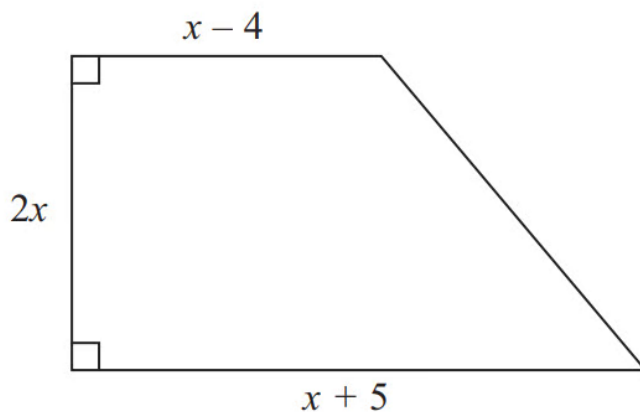


Diagram **NOT**
accurately drawn

All the measurements are in centimetres.

The area of the trapezium is 351 cm^2 .

(a) Show that $2x^2 + x - 351 = 0$

[2 marks]

Question 10

Alison is using the quadratic formula to solve a quadratic equation.

She substitutes values into the formula and correctly gets

$$x = \frac{-7 \pm \sqrt{49 - 32}}{4}$$

Work out the quadratic equation that Alison is solving.

Give your answer in the form $ax^2 + bx + c = 0$, where a , b and c are integers.

[3 marks]



Question 11

(b) Solve $\frac{2}{y^2} + \frac{9}{y} - 7 = 0$

Give your solutions correct to 3 significant figures.

[2 marks]

Question 12

(b) Solve $x^2 + 90x - 1200 = 0$

Find the value of x correct to 3 significant figures.

[3 marks]

Question 13

(b) Solve $4x^2 + 9x - 47 = 0$

Show your working clearly.

Give your solutions correct to 3 significant figures.

[3 marks]



Question 14

(b) Work out the value of x .

[3 marks]

Question 15

(a) Solve $2x^2 + 9x - 7 = 0$

Give your solutions correct to 3 significant figures.

[3 marks]