

Name: _____

GCSE (1 – 9)

Solving Quadratics by Factorising

Instructions

- Use **black** ink or ball-point pen.
- Answer all Questions.
- Answer the Questions in the spaces provided
– *there may be more space than you need.*
- Diagrams are **NOT** accurately drawn, unless otherwise indicated.
- You must **show all your working out.**

Information

- The marks for each Question are shown in brackets
– *use this as a guide as to how much time to spend on each Question.*

Advice

- Read each Question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every Question.
- Check your answers if you have time at the end

1 (a) Factorise $a^2 + 3a - 28$

(b) Solve $a^2 + 3a - 28 = 0$

.....
(2)

.....
(1)

(Total for Question 1 is 3 marks)

2 (a) Factorise $x^2 - 7x + 10$

(b) Solve $x^2 - 7x + 10 = 0$

.....
(2)

.....
(1)

(Total for Question 2 is 3 marks)

3 (a) Factorise $b^2 + 9b + 20$

(b) Solve $b^2 + 9b + 20 = 0$

.....
(2)

.....
(1)

(Total for Question 3 is 3 marks)

4 (a) Factorise $x^2 - 3x - 18$

(b) Solve $x^2 - 3x - 18 = 0$

.....
(2)

.....
(1)

(Total for Question 4 is 3 marks)

5 (a) Factorise $y^2 - 10y + 9$

(b) Solve $y^2 - 10y + 9 = 0$

.....
(2)

.....
(1)

(Total for Question 5 is 3 marks)

6 (a) Factorise $a^2 - a - 56$

(b) Solve $a^2 - a - 56 = 0$

.....
(2)

.....
(1)

(Total for Question 6 is 3 marks)

7 Solve $x^2 + 14x + 24 = 0$

.....
(Total for Question 7 is 3 marks)

8 Solve $x^2 + 5x - 6 = 0$

.....
(Total for Question 8 is 3 marks)

9 Solve $x^2 + 5x + 6 = 0$

.....
(Total for Question 9 is 3 marks)

10 Solve $x^2 - 12x + 32 = 0$

.....
(Total for Question 10 is 3 marks)

11 Solve $x^2 + 19x + 90 = 0$

.....
(Total for Question 11 is 3 marks)

12 Solve $x^2 + 11x - 42 = 0$

.....
(Total for Question 12 is 3 marks)

13 Solve $a^2 - 10a + 16 = 0$

.....
(Total for Question 13 is 3 marks)

14 Solve $y^2 - 2y - 35 = 0$

.....
(Total for Question 14 is 3 marks)

15 Solve $x^2 + 3x - 54 = 0$

.....
(Total for Question 15 is 3 marks)

16 Solve $b^2 - 10b - 24 = 0$

.....
(Total for Question 16 is 3 marks)

17 Solve $m^2 + 13m + 40 = 0$

.....
(Total for Question 17 is 3 marks)

18 Solve $x^2 + 10x - 24 = 0$

.....
(Total for Question 18 is 3 marks)
