Name:

Exam Style Questions

GCSE Foundation
Solving Quadratics

Corbettmaths

Equipment needed: Pen, Calculator

Guidance

1. Read each question carefully before you begin answering it.
2. Check your answers seem right.
3. Always show your workings

Video Tutorial

www.corbettmaths.com/contents

Videos 266, 267e

Answers and Video Solutions

1. Solve $(x-2)(x+9)=0$

.....

(1)

---

2. Circle the two roots of $(x-6)(x+1)=0$

-6 -1 1 6

(1)

---

3. Solve $x^2+5x+6=0$

.....

(2)

---

4. Solve $x^2+9x+14=0$

.....

(2)

5. Solve $x^2 + 21x + 20 = 0$

.....

(2)

---

6. Solve $x^2 - 3x - 18 = 0$

.....

(2)

---

7. Solve $x^2 + x - 12 = 0$

.....

(2)

---

8. Solve $x^2 - x - 6 = 0$

.....

(2)

9. Solve $x^2 - 49 = 0$

.....

(2)

---

10. Solve $x^2 - 2x - 8 = 0$

.....

(2)

---

11. Solve $x^2 + 10x - 24 = 0$

.....

(2)

---

12. Solve $x^2 - 13x + 30 = 0$

.....

(2)

13. Solve $y^2 + 4y - 12 = 0$

.....

(2)

---

14. Solve $m^2 + 24m + 63 = 0$

.....

(2)

---

15. Solve $m^2 - 16m + 64 = 0$

.....

(2)

---

16. The two solutions to $x^2 + bx + c = 0$ are $x = -8$ and $x = -2$

Find the values of b and c

b = ... c = ...

(2)

17. The equation $x^2 + bx + c = 0$ has one solution of $x = -3$

Find the values of b and c

b = ... c = ...

(2)

---

18. Solve $y^2 - 6y = 27$

.....

(2)

---

19. Solve $w^2 + 2w = 8$

.....

(2)

---

20. Solve $x^2 = 8x - 15$

.....

(2)

21. Solve $x^2 + 70 = 17x$

.....

(2)

---

22. Solve $y^2 + 9y + 2 = 8y + 58$

.....

(2)

23. Victor is y years old.

His brother Fred is four years old than Victor.

The product of their ages is 780.

(a) Set up an equation to represent this information.

.....

(2)

(b) Solve your equation from (a) to find Victor's age.

.....

(2)

24. A rectangular field is 30m longer than wide.

The area of the field is 8800m²

Work out the perimeter of the field.

.....m

(4)