

Name: _____

GCSE (1 – 9)

Quadratic Inequalities

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. Solve $x^2 + 4x + 3 > 0$

..... (3)

2. Solve $x^2 - x - 20 < 0$

..... (3)

3. Solve $x^2 - 5x - 24 > 0$

..... (3)

4. Solve $x^2 - 12x + 35 < 0$

..... (3)

5. Solve $x^2 - 7x + 12 \leq 0$

..... (3)

6. Solve $x^2 + 2x - 35 \geq 0$

..... (3)

7. Solve $x^2 \leq 100$

..... (4)

8. Solve $x^2 - 49 > 0$

..... (4)

9. Solve $x^2 > 8x + 9$

..... (4)

10. Solve $6x^2 + 11x - 10 < 0$

..... (4)

11. Solve $6x + 27 > x^2$

..... (4)

12. Solve $2x^2 - 11x + 9 < 0$

..... (4)

13. Work out the integer values that satisfy:

$$2x^2 - 10x + 10 < 0$$

..... (4)

14. Work out the integer values that satisfy:

$$x^2 - 7x + 11 < 0$$

..... (4)