Name: _____

ASM Tuition Academy

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 you're 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 time.
- Try to answer every question.
- Check your answers if you have time at the end.

Q1. Solve $x^2 + 5x + 6 > 0$

(Total for Question 1 is 3 marks)

Q2. Solve $x^2 - 3x - 4 < 0$

(Total for Question 2 is 3 marks)

Q3. Solve $x^2 + 2x - 8 > 0$

(Total for Question 3 is 3 marks)

Q4. Solve $x^2 - 7x + 12 < 0$

(Total for Question 4 is 3 marks)

Q5. Solve $x^2 - 12x + 35 \leq 0$

(Total for Question 5 is 3 marks)

Q6. Solve $x^2 - 2x - 15 \geq 0$

(Total for Question 6 is 3 marks)

Q7. Solve $x^2 \leq 25$

(Total for Question 7 is 4 marks)

Q8. Solve $x^2 - 16 > 0$

(Total for Question 8 is 4 marks)

Q9. Solve $x^2 > 8 - 2x$

(Total for Question 9 is 4 marks)

Q10. Solve $3x^2 - 2x - 5 < 0$

(Total for Question 10 is 4 marks)

Q11. Solve $5x + 14 > x^2$

(Total for Question 11 is 4 marks)

Q12. Solve $2x^2 - 7x - 4 < 0$

(Total for Question 12 is 4 marks)

Q13. Work out the integer values that satisfy:

$2x^2 - 10x + 4 < 0$

(Total for Question 13 is 4 marks)

Q14. Work out the integer values that satisfy:

$x^2 - 7x + 9 < 0$

(Total for Question 14 is 4 marks)
