JRA Tutors
Private tuition and small online Study Pods

Inequalities

Grade 4 topic · Foundation and Higher · Edexcel and AQA

How to use this pack
20 questions that get harder as you go. Foundation students: aim for Questions 1–15 (41 marks) and have a go at the rest. Higher students: complete all 20. Show your working on the lines and write your final answer on the answer line, then mark yourself with the answers at the back. Diagrams are not drawn accurately. Total: 65 marks.

Warm-up

1 Solve $x + 4 > 10$. **[2 marks]**

Answer _____

2 Solve $x - 3 > 3$. **[2 marks]**

Answer _____

3 Solve $2x \geq 14$. **[2 marks]**

Answer _____

4 Solve $x/5 \geq 9$. **[2 marks]**

Answer _____

5 Solve $x + 4 > 7$. **[2 marks]**

Answer _____

Core

6 Solve $3x - 8 > 1$. **[3 marks]**

Answer _____

7 Solve $5x - 6 \geq 34$. **[3 marks]**

Answer _____

8 Solve $6x - 7 \geq 5$. **[3 marks]**

Answer _____

9 Solve $2x - 6 \geq -2$. **[3 marks]**

Answer _____

10 Solve $6x - 9 \leq 45$. **[3 marks]**

Answer _____

Stretch

11 Solve $-6x < -42$. **[3 marks]**

Answer _____

12 List the integers that satisfy $-1 < x \leq 6$. **[3 marks]**

Answer _____

13 Solve $5 - 2x \geq -13$. **[3 marks]**

Answer _____

14 Solve $3x + 2 > x + 6$. **[4 marks]**

Answer _____

15 Solve $3(x + 2) \leq 12$. **[3 marks]**

Answer _____

Challenge

16 Solve $-5 < 3x + 1 \leq 10$ and list the integer solutions. **[5 marks]**

Answer _____

17 Solve $4(x - 2) > 2x + 6$. **[4 marks]**

Answer _____

18 n is an integer and $2 \leq 2n + 1 < 11$. List all possible values of n. **[5 marks]**

Answer _____

19 Solve $7 - 3x < 1$ and write down the smallest integer that satisfies it. **[5 marks]**

Answer _____

20 Solve $(x + 3)/2 \geq (2x - 1)/3$. **[5 marks]**

Answer _____