

1 a Solve the inequality

$$11 - 3x \geq 20 + x \quad \text{(2 marks)}$$

b Using algebra, find the set of values of x for which

$$5x + 14 > \frac{3}{x} \quad \text{(5 marks)}$$

c Hence write down the set of values of x for which

$$11 - 3x \geq 20 + x \quad \text{and} \quad 5x + 14 > \frac{3}{x} \quad \text{(1 mark)}$$

2 Using algebra, find the exact set of values of x for which

$$\frac{x-3}{x} < \frac{4}{x+4} \quad \text{(8 marks)}$$

3 Using algebra, find the set of values of x for which

$$\frac{x+2}{x+4} \leq \frac{x}{3(x-1)} \quad \text{(9 marks)}$$