

National 5 Homework

Algebraic Skills

Equations and Inequalities

1. Solve algebraically the inequality

$$14 - 5x < 3(2x + 1).$$

2. Solve  $5x - 9 > 4(3 - x)$ , leaving your answer in its simplest form.

3. Solve algebraically the inequality

$$3(2 - 3x) > 3(4x - 5).$$

4. Solve algebraically the equation

$$\frac{x+4}{3} = \frac{2x}{5}.$$

5. Solve algebraically the inequality

$$12 - 7x > 20 - (2x + 3).$$

6. Solve the equation

$$\frac{2x}{3} - \frac{5}{6} = 2x \quad \text{[SQA Paper 1 ; 3 Marks]}$$

7. Solve  $7 - x > 4(2x - 5)$

8. Solve algebraically the inequality

$$11 - 2(1 + 3x) < 39 \quad \text{[SQA Paper 1 ; 3 Marks]}$$

9. Solve algebraically the equation

$$\frac{5p}{4} + \frac{3}{8} = 2p$$

Leave your answer in its simplest form.

10. Solve algebraically the inequality

$$21 - 3(3 + 2x) > 3x$$