

## National 5 Final Exam Practice

Algebraic Skills

Equations and Inequalities

Average Allocation

3 Marks

1. Solve  $\frac{x+10}{3} = 2x$
2. Solve  $2(3x + 5) = 2 - 3x$ .
3. Solve  $\frac{3(p+2)}{4p} = \frac{2}{3}$ .
4. Solve  $\frac{2p-3}{4} = \frac{2p}{5}$
5. Solve  $\frac{3}{2x} = \frac{2}{x+2}$
6. Solve algebraically the inequality  $1 - 3(x - 4) > (2x - 1)$ .
7. Solve  $3(3x + 1) < 3(5x + 3)$
8. Solve  $\frac{3x}{4} - \frac{5x}{12} = 2$ .
9. Solve  $\frac{2a}{5} + \frac{3a}{10} = 4$ .
10. Solve algebraically the inequality  $3(5 - 2x) \leq 2(4 - x)$ .
11. Solve  $4(p - 4) < 3(2p + 3)$ .
12. Solve algebraically the equation  $8 - 6(2x + 3) = 2(2x - 7)$ .
13. Solve  $\frac{2-x}{3} = \frac{3x}{4}$
14. Solve  $\frac{1}{3} + \frac{5x}{6} = 3x$
15. Solve  $\frac{1}{2}(3x - 4) > \frac{1}{4}x$ .
16. Solve  $\frac{2x}{3} + \frac{5}{6} \geq 2x$
17. Solve algebraically the inequality  $8 - 2(3 - x) > 4x$
18. Solve  $\frac{2x+5}{3} = \frac{3x}{7}$
19. Solve algebraically the inequality  $x + 12 < 3(3x + 2)$
20. Solve algebraically the inequality  $x - 10 > 11 - 2(x + 3)$