

National 5 Mathematics
Exam Questions by Topic
**Brackets, Equations
& Inequations**

2015 N5 Past Paper P1, Q2

1. Solve algebraically the inequality

$$11 - 2(1 + 3x) < 39 \quad (3 \text{ marks})$$

2015 N5 Past Paper P1, Q4

2. Multiply out the brackets and collect like terms

$$(x - 4)(x^2 + x - 2) \quad (3 \text{ marks})$$

2014 N5 Past Paper P1, Q2

3. Multiply out the brackets and collect like terms.

$$(2x - 5)(3x + 1) \quad (2 \text{ marks})$$

2014 N5 Past Paper P2, Q11

4. Change the subject of the formula $s = ut + \frac{1}{2}at^2$ (3 marks)

2013 N5 Specimen P1, Q2

5. Multiply out the brackets and collect like terms

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

2013 N5 Specimen P1, Q4

6. Solve the equation

$$2x^2 + 7x - 15 = 0 \quad (3 \text{ marks})$$

2013 N5 Specimen P1, Q8

7. Change the subject of the formula $p = \frac{mv^2}{2}$ to v (3 marks)

2013 N5 Specimen P2, Q12

8. Find the range of values of p such that the equation
 $px^2 - 2x + 3 = 0$ (4 marks)

N5 Practice Paper A, P1, Q2

9. Factorise $x^2 + 2x - 15$ (2 marks)

N5 Practice Paper A, P1, Q5

10. $P = R^3b - 5$
Change the subject of the formula to R (3 marks)

N5 Practice Paper A, P2, Q3

11. Multiply out the brackets and collect like terms
 $(x + 4)(2x^2 + 3x - 1)$ (3 marks)