National 5 Homework Algebraic Skills Expressions and Brackets 1. Expand and simplify $(x + 3)(x^2 - 3x + 5)$. 2. Expand and simplify (x - 4)(x + 2)(x - 1). 3. Multiply out the brackets and collect like terms

 $(2x + 1)(x^2 - 4x - 1).$

- 4. Expand and simplify (x 5)(x + 2)(x + 3).
- 5. Multiply out the brackets and simplify (3x 5)(x 3)(x 1)
- 6. Multiply out the brackets and collect the like terms

$$(x-4)(x^2+x-2)$$
 [SQA Paper 1 3 marks]

7. Multiply out the brackets and collect like terms.

(x-3)(x+2)(x+4)

- 8. Multiply out the brackets and simplify $(x 4)(x^2 4x + 3)$
- 9. Expand and simplify $(x + 6)(x^2 x + 4)$.
- 10. Multiply out the brackets and collect like terms.

(x-3)(x-4)(x-1).

11. Expand and simplify

 $(2x + 3)(x^2 - 4x + 1)$ [SQA Paper 1 3 marks]