## National 5 Mathematics

## Algebraic Operations - Questions

Marks are indicated in brackets after each question number

2014 Paper 1 Question 2, (2)
Multiply out the brackets and collect like terms:
$(2 x-5)(3 x+1)$.

2015 Paper 1 Question 4, (3)
Multiply out the brackets and collect like terms

$$
(x-4)\left(x^{2}+x-2\right)
$$

2016 Paper 2 Question 4, (2)
Factorise fully $3 x^{2}-48$.

2017 Paper 1 Question 4, (3)
Expand and simplify $(2 x+3)\left(x^{2}-4 x+1\right)$.

2017 Paper 1 Question 8, (1) (3)
(a) Factorise $4 x^{2}-25$.
(b) Hence simplify $\frac{4 x^{2}-25}{2 x^{2}-x-10}$.

2018 Paper 1 Question 2, (3)
Expand and simplify $(3 x+1)(x-1)+2\left(x^{2}-5\right)$.

2019 Paper 1 Question 3, (3)
Expand and simplify $(x+5)\left(2 x^{2}-7 x-3\right)$.

2022 Paper 2 Question 1, (3)
Expand and simplify $(3 x-2)\left(2 x^{2}+5 x-1\right)$.

2023 Paper 1 Question 2, (3)
Expand and simplify $(x+7)^{2}+6\left(x^{2}-10\right)$.

