



## National 5 Mathematics

### Functions - Questions

Marks are indicated in brackets after each question number

#### **2015 Paper 2 Question 2, (2)**

A function is defined as  $f(x) = 3x + 2$ .

Given that  $f(a) = 23$ , calculate  $a$ .

#### **2016 Paper 1 Question 9, (2)**

The function  $f(x)$  is defined by  $f(x) = \frac{2}{\sqrt{x}}$ ,  $x > 0$ .

Express  $f(5)$  as a fraction with a rational denominator.

#### **2017 Paper 1 Question 1, (2)**

Given that  $f(x) = x^2 + 3x$ , evaluate  $f(-5)$ .

#### **2018 Paper 2 Question 6, (2)**

A function is defined as  $f(x) = 5 + 4x$ .

Given that  $f(a) = 73$ , calculate  $a$ .

#### **2019 Paper 1 Question 1, (2)**

Given that  $f(x) = 5x^3$ , evaluate  $f(-2)$ .



**2022 Paper 1 Question 2, (2)**

Given that  $f(x) = x^3 - 2$ , evaluate  $f(-3)$ .

**2024 Paper 1 Question 2, (2)**

Given that  $f(x) = (x+3)^2$ , evaluate  $f(7)$ .

**2025 Paper 1 Question 7, (1) (2)**

A function is defined as  $f(x) = 3x + 7$ .

(a) Evaluate  $f(6)$ .

(b) Given that  $f(p) = 19$ , find the value of  $p$ .