



## National 5 Mathematics

### Rearranging Formulae - Solutions

Marks are indicated in brackets after each question number

#### **2014 Paper 2 Question 11, (3)**

$$s = ut + \frac{1}{2}at^2$$

$$s - ut = \frac{1}{2}at^2$$

$$2s - 2ut = at^2$$

$$\frac{2s - 2ut}{t^2} = a$$

#### **2016 Paper 2 Question 12, (3)**

$$L = \sqrt{4kt - p}$$

$$L^2 = 4kt - p$$

$$L^2 + p = 4kt$$

$$\frac{L^2 + p}{4t} = k$$

#### **2017 Paper 1 Question 10, (3)**

$$F = \frac{t^2 + 4b}{c}$$

$$Fc = t^2 + 4b$$

$$Fc - t^2 = 4b$$

$$b = \frac{Fc - t^2}{4}$$



**2018 Paper 1 Question 14 (3)**

$$y = g\sqrt{x} + h$$

$$g\sqrt{x} = y - h$$

$$\sqrt{x} = \frac{y - h}{g}$$

$$x = \left(\frac{y - h}{g}\right)^2$$

**2019 Paper 1 Question 7 (3)**

$$A = \frac{1}{2}h(x + y)$$

$$2A = h(x + y)$$

$$2A = hx + hy$$

$$2A - hy = hx$$

$$x = \frac{2A - hy}{h}$$

**2022 Paper 1 Question 7, (2)**

$$D = \frac{B + 4}{C^2}$$

$$DC^2 = B + 4$$

$$B = DC^2 - 4$$

**2023 Paper 2 Question 7, (3)**

$$P = \frac{1}{3}mn - r$$

$$P + r = \frac{1}{3}mn$$

$$3(P + r) = mn$$

$$m = \frac{3(P + r)}{n}$$