Firrhill High School

Mathematics Department

Level 5
Assessment Questions

# Algebra

Changing the Subject of a Formula

### (1) 2010 Paper 1 Q.3

Change the subject of the formula to s.

$$t=\frac{7s+4}{2} \ .$$

3

#### (2) 2009 Paper 1 Q.9

A formula used to calculate the flow of water in a pipe is

$$f = \frac{kd^2}{20}.$$

Change the subject of the formula to d.

(3) 2008 Paper 1 Q.3

$$W = BH^2$$
.

Change the subject of the formula to H.

2

#### (4) 2007 Paper 1 Q.4

$$P = \frac{2(m-4)}{3}$$

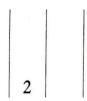
Change the subject of the formula to m.

# 3

# (5) 2002 paper 1 Q.6

$$L = \frac{1}{2}(h - t).$$

Change the subject of the formula to h.



# (6) 2015 Int2 Paper 2

6. Change the subject of the formula

$$A = \frac{1}{2}(b+c)d$$
 to b.

#### (7) 2014 N5 Paper 2

11. Change the subject of the formula  $s = ut + \frac{1}{2}at^2$  to a.

3

#### (8) 2014 Int2 Paper 2

7. Change the subject of the formula

$$p = \frac{qr^2}{3} \quad \text{to } r.$$

#### 9) 2013 Credit Paper 1

**4.** Change the subject of the formula to r.

$$A = 4\pi r^2.$$

#### 10) 2013 Int 2 Paper 2

8. Change the subject of the formula

$$a = 3b^2 + c$$

to b.

# 11) 2012 Credit Paper 1

3. Change the subject of the formula to m.

$$L = \frac{\sqrt{m}}{k}$$

#### 12) 2012 Int 2 Paper 2

9. A formula used to calculate lighting efficiency is

$$E = \frac{I}{D^2}.$$

Change the subject of this formula to D.

3

#### 13) 2011 Int 2 Paper 2

3. Change the subject of the formula

$$A = 4\pi r^2$$

to r.