

National 5 Mathematics

Arcs & Sectors - Solutions - 2014-2017

Marks are indicated in brackets after each question number

2015 Paper 1 Question 2, (3)

$$11 - 2(1 + 3x) < 39$$

$$11 - 2 - 6x < 39$$

$$-6x < 30$$

$$x > -5 \quad \text{remember to reverse inequality sign when dividing by a negative}$$

2016 Paper 1 Question 8, (3)

$$\frac{2x}{3} - \frac{5}{6} = 2x$$

Multiplying by 6 gives

$$4x - 5 = 12x$$

$$8x = -5$$

$$x = -\frac{8}{5}$$

2017 Paper 1 Question 8, (3)

$$19 + x > 15 + 3(x - 2)$$

$$19 + x > 15 + 3x - 6$$

$$10 > 2x$$

$$5 > x$$