



Activity 3

Exemplar initial assessment

1. Simplify:

a. $\sqrt{5} \times \sqrt{5}$

b. $(\sqrt{17})^2$

c. $2\sqrt{11} \times 7\sqrt{11}$

d. $(10\sqrt{3})^2$

2. Factorise:

a. $6x^2 - x - 1$

b. $1 - 81x^2$

c. $21 + 11x - 2x^2$

d. $3x^2 - 27$

3. Solve:

a. $3x + 2 = 8x - 2$

b. $10(2x - 3) = 4(1 - x)$

c. $11 - 8x = 2(3x + 7)$

4. Solve these simultaneous equations:

a. $3x - 4y = -5$ $7x + 20y = 47$

b. $2x - y = 8$ $6x + 5y = 8$

c. $4x + 3y = 1$ $10x - 7y = -12$

d. $8x - 2y = 4$ $6x - 5y = -11$

Prior Assessment questions

5. Factorise $x^2 - 3x - 10$ [Summer 2015, 0607 Paper 23 q10a – 2 marks]

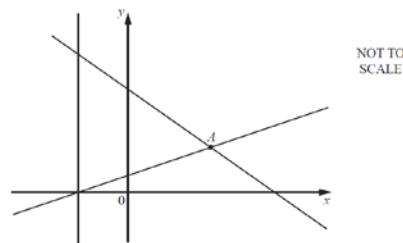
6. Solve these simultaneous equations.

$$5x + 2y = 11$$

$$4x - 3y = 18$$

[Summer 2015, 0607 Paper 22 q9 – 4 marks]

7. The diagram shows the lines $x = -2$, $y = \frac{1}{2}x + 1$ and $3x + 4y = 20$



Use simultaneous equations to find the co-ordinates of the point A

[Summer 2015, 0607 Paper 23 q7(a) – 3 marks]23 q7(a)