

## A045 Quadratic equations 1

Q1.

Solve  $x^2 + 5x - 24 = 0$

.....  
**(Total for question = 3 marks)**

**Q2.**

(a) (i) Factorise  $x^2 - 12x + 27$

(ii) Solve the equation  $x^2 - 12x + 27 = 0$

(b) Factorise  $y^2 - 100$

(3)

(1)

**(Total for Question is 4 marks)**

**Q3.**

(a) Expand and simplify  $(e + 3)(e - 5)$

(2)

(b) Solve  $y = \frac{2y + 1}{5}$

Show clear algebraic working.

(3)

(c) Solve  $x^2 + 3x - 18 = 0$

Show your working clearly.

(3)

**(Total for question = 8 marks)**

**Q4.**

Solve  $x^2 - 6x - 55 = 0$

.....  
**(Total for question = 3 marks)**

**Q5.**

Solve  $x^2 - 17x + 72 = 0$

.....  
**(Total for question = 3 marks)**

**Q6.**

Solve  $x^2 - 2x - 8 = 0$

.....  
**(Total for question = 3 marks)**

**Q7.**

Solve  $9x^2 - 100 = 0$

.....  
**(Total for question = 2 marks)**

**Q8.**

Solve  $p^2 - 25 = 0$

.....  
**(Total for question = 2 marks)**

**Q9.**

Solve  $81 - x^2 = 0$

.....  
**(Total for question = 2 marks)**

**Q10.**

Solve  $144 - 25y^2 = 0$

.....  
**(Total for question = 3 marks)**