

# Mathematics Drop-in Centre

## QUADRATICS, PART 1

A quadratic equation is an equation of the form

$$ax^2 + bx + c = 0$$

where  $a$ ,  $b$  and  $c$  are constants and  $a \neq 0$ .  
The equation may be written as  $ax^2 + bx + c = 0$ .  
The coefficients  $a$ ,  $b$  and  $c$  are constants.

### Solving by inspection

For a quadratic equation  $ax^2 + bx + c = 0$ ,  
if  $a = 1$ ,  $b = 0$  and  $c = -1$ , then the equation is  $x^2 - 1 = 0$ .

$$x^2 - 1 = 0$$

no  $x^2 - 1 = 0$  so  $x = 1$  or  $x = -1$ .

$$x^2 - x - 1 = 0$$

so  $x = 1$  or  $x = -1$ .

# EXERCISES

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