

**Quadratic Equations - [www.m4ths.com](http://www.m4ths.com) – Steve Blades**

**Solve each equation by either square rooting both sides, by factoring using single brackets or by factoring using double brackets.**

**All of the answers are integers, so if you don't have an integer (or two!) for your answers check your method!**

(1)  $x^2 = 121$

(11)  $x^2 + 5x + 6 = 0$

(21)  $x^2 = 5x + 36$

(2)  $4x^2 = 400$

(12)  $x^2 = 7x$

(22)  $(5x - 3)(x - 7) = 0$

(3)  $x^2 - 23 = 121$

(13)  $x^2 - 100 = 0$

(23)  $x^2 = 8x$

(4)  $x^2 - 9x = 0$

(14)  $x^2 + 14x + 13 = 0$

(24)  $x^2 + 10x - 24 = 0$

(5)  $2x^2 + 10x = 0$

(15)  $x^2 = 4x + 12$

(25)  $6 - x^2 - x = 0$

(6)  $x^2 = 625$

(16)  $x^2 - 5x - 14 = 0$

(26)  $x^2 = x + 42$

(7)  $4x^2 + 3x = 0$

(17)  $(x - 3)(2x + 1) = 0$

(27)  $5x^2 = 125$

(8)  $x^2 + 2x = 0$

(18)  $2x^2 - 98 = 0$

(28)  $x^2 - 10x = -25$

(9)  $x^2 + x - 20 = 0$

(19)  $x^2 - 4 + 3x = 0$

(29)  $2x^2 + 2x = 24$

(10)  $7x^2 - 14x = 0$

(20)  $x^2 - x = 12$

(30)  $x^2 + x = 56$