



Quadratic Equations



1. Solve the following equations for the unknown variable x .

- (i) $x^2 + 2x + 1 = 0$
- (ii) $2x^2 + 5x + 2 = 0$
- (iii) $x^2 - x = 0$
- (iv) $x^2 - 1 = 0$
- (v) $2x^2 + 10x - 28 = 0$
- (vi) $x^2 - 6x - 7 = 0$
- (vii) $4x^2 - 9 = 0$
- (viii) $6x^2 - 8x = 0$
- (ix) $2x^2 - 7x + 3 = 0$
- (x) $x^2 + 3x + 2 = 0$
- (xi) $2x^2 - 4x = 0$
- (xii) $x^2 - y^2 = 0$
- (xiii) $x^2 - 4 = 0$
- (xiv) $x^2 + 12x - 13 = 0$
- (xv) $3x^2 + 7x + 4 = 0$
- (xvi) $x^2 + 4x + 4 = 0$
- (xvii) $7x^2 - 2x = 0$
- (xviii) $3x^2 + 5x - 2 = 0$
- (xix) $x^2 + 5x + 4 = 0$
- (xx) $9x^2 - 4y^2 = 0$
- (xxi) $6x^2 - 5x - 4 = 0$
- (xxii) $\frac{5x^2}{2} - 3x = 0$
- (xxiii) $3x^2 + 5x - 2 = 0$
- (xxiv) $x^2 + 8 = -6x$
- (xxv) $28x^2 - 42x = 0$
- (xxvi) $4x^2 - 15x - 4 = 0$
- (xxvii) $x^2 + 11x + 10 = 0$
- (xxviii) $12x^2 - 4x = 0$
- (xxix) $3x^2 - 12x - 36 = 0$
- (xxx) $16a^2 - 25b^2 = 0$
- (xxxi) $x^2 - 2x - 24 = 0$
- (xxxii) $x^3 - 4x = 0$
- (xxxiii) $x = 4/3, x = -1/2$
- (xxxiv) $x^2 + 3x = 28$
- (xxxv) $-(13x^2 - 35x - 12) = 0$
- (xxxvi) $x^2 - 10x + 9 = 0$





- (xxxvii) $12x^2 + 2 = 10x$
- (xxxviii) $4x^2 - 9 = 0$
- (xxxix) $8x^2 + 26x - 7 = 0$
- (xl) $x^2 + x - 110 = 0$
- (xli) $6x^2 - 5x = 4$

2. Solve the following quadratic equations expressing your answer to the nearest two decimal places.

- (i) $x^2 - 4x - 8 = 0$
- (ii) $2x^2 + 11x + 6$
- (iii) $2x^2 - 3x - 11 = 0$
- (iv) $3x^2 - 10x + 5 = 0$
- (v) $2x^2 + x - 1/2 = 0$

