

1. Solve the quadratic equations by using the formula, giving answers to 2 decimal places.

(a) $x^2 + 3x + 1 = 0$

(b) $x^2 + 4x + 1 = 0$

(c) $x^2 + 5x + 1 = 0$

(d) $x^2 - 3x + 1 = 0$

(e) $x^2 - 4x + 1 = 0$

(f) $x^2 - 5x + 1 = 0$

(g) $x^2 - 6x + 1 = 0$

(h) $x^2 + x - 1 = 0$

(i) $x^2 + x - 3 = 0$

(j) $x^2 + x - 4 = 0$

(k) $x^2 + x - 5 = 0$

(l) $x^2 + 2x - 2 = 0$

2. Solve the quadratic equations by using the formula, giving answers to 2 decimal places.

(a) $4 = x^2 + 2x$

(b) $5 = x^2 + 2x$

(c) $2 = x^2 + 3x$

(d) $3 = x^2 + 3x$

(e) $5 = x^2 + 3x$

(f) $2 = x^2 + 4x$

(g) $3 = x^2 + 4x$

(h) $4 = x^2 + 4x$

(i) $6 = x^2 + 4x$

(j) $1 = x^2 + 5x$

(k) $2 = x^2 + 5x$

(l) $3 = x^2 + 5x$

3. Solve the quadratic equations by using the formula, giving answers to 2 decimal places.

(a) $2x^2 + 6x + 3 = 0$

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

(c) $2x^2 + 5x + 3 = 0$

(d) $4 - 6x = 2x^2$

(e) $2x^2 = 4 - 5x$

(f) $2x^2 + 4x = 4$

4. A rectangular box has dimensions $(x + 6)$ cm by $(x + 5)$ cm by 10 cm.

If the box has a volume of 1 litre, what is the value of x ?
(answer to 2 decimal places)

5. A rectangular box has dimensions in cm of height x , width $(x - 2)$ and length $3x$.

If the surface area of the box is 300 square cm, what is the value of x ?
(answer to 2 decimal places)

1.

(a) $-0.38, -2.62$

(b) $-0.27, -3.73$

(c) $-0.21, -4.79$

(d) $2.62, 0.38$

(e) $3.73, 0.27$

(f) $4.79, 0.21$

(g) $5.83, 0.17$

(h) $0.62, -1.62$

(i) $1.3, -2.3$

(j) $1.56, -2.56$

(k) $1.79, -2.79$

(l) $0.73, -2.73$

2.

(a) $1.24, -3.24$

(b) $1.45, -3.45$

(c) $0.56, -3.56$

(d) $0.79, -3.79$

(e) $1.19, -4.19$

(f) $0.45, -4.45$

(g) $0.65, -4.65$

(h) $0.83, -4.83$

(i) $1.16, -5.16$

(j) $0.19, -5.19$

(k) $0.37, -5.37$

(l) $0.54, -5.54$

3.

(a) $-0.63, -2.37$

(b) $-0.50, -3.00$

(c) $-1.00, -1.50$

(d) $0.56, -3.56$

(e) $0.64, -3.14$

(f) $0.73, -2.73$

4. 4.51 cm

5. 5.24 cm