



Quadratics Worksheet

Factorise these expressions by completing the square

1. $x^2 - 2x + 3$
2. $x^2 + 4x - 6$
3. $x^2 - 6x - 2$
4. $x^2 - 7x + 1$
5. $x^2 + 8x$
6. $k^2 - 8k - 3$
7. $y^2 + 5y - 2$
8. $2x^2 + 6x - 8$
9. $4x^2 + 4x - 4$
10. $3x^2 + 6x + 9$

Solve these equations by completing the square

1. $x^2 + 6x - 7 = 0$
2. $x^2 - 8x - 9 = 0$
3. $x^2 + 4x - 3 = 0$
4. $2x^2 + 6x - 8 = 0$
5. $x^2 - 5x - 1 = 0$

Solve these equations by using the formula

1. $2x^2 + 3x - 1 = 0$
2. $x^2 + 5x - 3 = 0$
3. $3x^2 + 6x - 2 = 0$
4. $2x^2 - 6x - 2 = 0$
5. $-x^2 + 3x - 1 = 0$

Solve these equations by using an appropriate method

1. $x^2 + 6x = 3$
2. $4x^2 - 4 = 12x$
3. Form an expression for the perimeter of the rectangle below. If the perimeter is 56cm, what are the possible values of x ?

