90. Factorising Quadratics with x² Coefficient of 1

Practice Questions

1. Factorise $x^2 + 7x + 12$.
2. Factorise $x^2 + 5x + 6$.
3. Factorise $x^2 + 9x + 14$.
4. Factorise $x^2 + 4x - 5$.
5. Factorise $x^2 - 6x + 8$.
6. Factorise $x^2 - x - 12$.
7. Factorise $x^2 - 5x + 4$.
8. Factorise $x^2 + 8x + 15$.
9. Factorise $x^2 - 7x + 10$.
10. Factorise $x^2 - 3x - 18$.

Scenario Questions

1. A rectangular garden has an area of $x^2 + 7x + 12$ square meters. Find its possible length and width.
2. A product is designed with an area of $x^2 + 5x + 6$ cm². What are its possible dimensions?
3. A path is built with an area of $x^2 + 9x + 14$ m². Find two possible lengths.
4. The sum of two numbers is 4, and their product is -5. Write and solve the quadratic equation that represents this.
5. The area of a square is $x^2 - 6x + 8$. What are its possible side lengths?
6. A farmer has a plot with an area of $x^2 - x - 12$ m². Find two possible lengths.
7. The sum of two numbers is 5, and their product is 4. Find the two numbers by factorising.
8. A garden is divided into two parts with areas that add up to $x^2 + 8x + 15$. Find two possible dimensions.
9. The area of a farm is $x^2 - 7x + 10$. Factorise the expression to find the possible dimensions.
10. A box's base area is $x^2 - 3x - 18$. What could its possible side lengths be?

Extra Content for Foundation GCSE

90. Factorising Quadratics with x^2 Coefficient of 1

Practice Questions

1. $(x+3)(x+4)$
2. $(x+2)(x+3)$
3. $(x+2)(x+7)$
4. $(x+5)(x-1)$
5. $(x-2)(x-4)$
6. $(x-4)(x+3)$
7. $(x-1)(x-4)$
8. $(x+3)(x+5)$
9. $(x-2)(x-5)$
10. $(x-6)(x+3)$

Scenario Questions

1. Length: $x+3$, Width: $x+4$
2. Dimensions: $x+2$ and $x+3$
3. Lengths: $x+2$ and $x+7$
4. Equation: $x^2+4x-5=0$, Solutions: $x=1$ and $x=-5$
5. Side lengths: $x-2$ and $x-4$
6. Lengths: $x-4$ and $x+3$
7. Numbers: 1 and 4
8. Dimensions: $x+3$ and $x+5$
9. Dimensions: $x-2$ and $x-5$
10. Side lengths: $x-6$ and $x+3$