ILLAWARRA TUTORING

In this worksheet you will learn how to factorise quadratic trinomials into the product of two binomials. Remember that a quadratic trinomial of the form $ax^2 + bx + c$ (where the factors are integers) can often be rewritten as $(mx + p)(nx + q)$, where $m \times n = a$ and $p \times q = c$, with $m \times q + n \times p = b$.

Easy Questions

1. Instruction: Factorise $x^2 + 5x + 6$.
2. Instruction: Factorise $x^2 + 7x + 12$.
3. Instruction: Factorise $x^2 + 3x - 10$.
4. Instruction: Factorise $x^2 - 5x + 6$.
5. Instruction: Factorise $x^2 - x - 12$.

Intermediate Questions

6. Instruction: Factorise $2x^2 + 5x + 2$.
7. Instruction: Factorise $3x^2 + 11x + 6$.
8. Instruction: Factorise $x^2 + 8x + 15$.
9. Instruction: Factorise $4x^2 + 11x + 6$.
10. Instruction: Factorise $3x^2 + 10x + 3$.
11. Instruction: Factorise $2x^2 + 3x - 2$.
12. Instruction: Factorise $6x^2 + 5x - 6$.
13. Instruction: Factorise $5x^2 + 7x + 2$.
14. Instruction: Factorise $4x^2 - 4x - 3$.
15. Instruction: Factorise $2x^2 - 5x - 3$.
16. Instruction: Factorise $3x^2 - 8x + 4$.
17. Instruction: Factorise $2x^2 + x - 6$.
18. Instruction: Factorise $5x^2 - 3x - 2$.

19. Instruction: Factorise $4x^2 + 3x - 1$.
20. Instruction: Factorise $3x^2 - 5x - 2$.

Hard Questions

21. Instruction: Factorise $6x^2 + 13x + 6$.
22. Instruction: Factorise $8x^2 + 14x - 15$.
23. Instruction: Factorise $12x^2 + 11x - 15$.
24. Instruction: Factorise $10x^2 - 3x - 7$.
25. Instruction: Factorise $9x^2 + 5x - 4$.
26. Instruction: Factorise $6x^2 - 17x + 5$.
27. Instruction: Factorise $8x^2 - 11x + 3$.
28. Instruction: Factorise $15x^2 + 2x - 8$.
29. Instruction: Factorise $14x^2 + 23x + 8$.
30. Instruction: Factorise $12x^2 - 5x - 7$.