

Factoring**Factoring Trinomials of the Form $x^2 + bx + c$**

$$x^2 + 2x - 15 = (x + 5)(x - 3)$$

Factor.

1. $x^2 + 4x + 4 =$

2. $x^2 - 7x + 6 =$

3. $x^2 + 7x + 12 =$

4. $x^2 + 13x + 22 =$

5. $x^2 - 8x + 15 =$

6. $x^2 + 8xy - 33y^2 =$

7. $x^2 - 15x + 56 =$

8. $x^2 + 14x + 40 =$

9. $x^2 + 18x + 45 =$

10. $x^2 + 2x - 35 =$

11. $x^2 + 4x - 32 =$

12. $x^2 - 6x - 16 =$

13. $x^2 + 2xy - 63y^2 =$

14. $x^2 + 23x + 132 =$

15. $x^2 - 14x - 72 =$

16. $x^2 + 5xy + 6y^2 =$

17. $x^2 - xy - 2y^2 =$

18. $x^2 - 14xy + 24y^2 =$

19. $x^2 + 16x + 28 =$

20. $x^2 - 16x + 39 =$

Factoring**Factoring Trinomials of the Form $ax^2 + bx + c$**

$$2x^2 - 8x - 10 = 2(x^2 - 4x - 5) = 2(x - 5)(x + 1)$$

Factor.

1. $12x^2 - 156x + 144 =$

2. $6x^2 - 15x + 6 =$

3. $2x^2 + 9x + 10 =$

4. $4x^2 - 18x + 20 =$

5. $3x^2 - 10x + 7 =$

6. $3x^2 - 5x - 12 =$

7. $3x^2 - 4x - 32 =$

8. $5x^2 + 25x + 30 =$

9. $3x^2 - 20x - 7 =$

10. $6x^2 - 15x - 21 =$

11. $7c^2 - 16c + 9 =$

12. $7x^2 - 26x - 8 =$

13. $2x^2 + 17x + 21 =$

14. $6a^2 - 21a + 15 =$

15. $2y^2 - 17y + 35 =$

16. $12x^2 - 6x - 18 =$

17. $4x^2 + 7x - 15 =$

18. $6x^2 - 25x - 25 =$

19. $4x^2 - 23x + 15 =$

20. $3x^2 + 19x + 20 =$