

Basic Factorising #3

Factorise

1. $4x - 4$

2. $g^2 + 4g$

3. $g^2 - 3g$

4. $15 + 5k$

5. $6y + 12$

6. $x^2 + 5x$

7. $2y - 8$

8. $x^2 + 2x$

9. $4y + 16$

10. $4k - 4$

11. $3k + 15$

12. $6 + 2k$

13. $4y + 16$

14. $5y - 15$

15. $2k + 2$

16. $3x - 9$

17. $3x + 12$

18. $x^2 + 4x$

19. $10 + 2y$

20. $x^2 - 2x$

Factorise Fully

1. $-4x - 12$

2. $6k + 4$

3. $y^3 + 5y^2$

4. $2xy + 2y$

5. $x^3 + x^2$

6. $6x^2 + 18x$

7. $4k - 12x$

8. $-3k - 9$

9. $12x - 18$

10. $-y - 4$

Answers: Basic Factorising #3

Factorise

$$11. \quad 4x - 4 = 4(x - 1)$$

$$12. \quad g^2 + 4g = g(g + 4)$$

$$13. \quad g^2 - 3g = g(g - 3)$$

$$14. \quad 15 + 5k = 5(3 + k) \text{ or } 5(k + 3)$$

$$15. \quad 6y + 12 = 6(y + 2)$$

$$16. \quad x^2 + 5x = x(x + 5)$$

$$17. \quad 2y - 8 = 2(y - 4)$$

$$18. \quad x^2 + 2x = x(x + 2)$$

$$19. \quad 4y + 16 = 4(y + 4)$$

$$20. \quad 4k - 4 = 4(k - 1)$$

$$21. \quad 3k + 15 = 3(k + 5)$$

$$22. \quad 6 + 2k = 2(3 + k) \text{ or } 2(k + 3)$$

$$23. \quad 4y + 16 = 4(y + 4)$$

$$24. \quad 5y - 15 = 5(y - 3)$$

$$25. \quad 2k + 2 = 2(k + 1)$$

$$26. \quad 3x - 9 = 3(x - 3)$$

$$27. \quad 3x + 12 = 3(x + 4)$$

$$28. \quad x^2 + 4x = x(x + 4)$$

$$29. \quad 10 + 2y = 2(5 + y)$$

$$30. \quad x^2 - 2x = x(x - 2)$$

Factorise Fully ("fully" means **every** factor has to be taken out, as below)

$$31. \quad -4x - 12 = -4(x + 3)$$

$$32. \quad 6k + 4 = 2(3k + 2)$$

$$33. \quad y^3 + 5y^2 = y^2(y + 5)$$

$$34. \quad 2xy + 2y = 2y(x + 1)$$

$$35. \quad x^3 + x^2 = x^2(x + 1)$$

$$36. \quad 6x^2 + 18x = 6x(x + 3)$$

$$37. \quad 4k - 12x = 4(k - 3x)$$

$$38. \quad -3k - 9 = -3(k + 3)$$

$$39. \quad 12x - 18 = 6(2x - 3)$$

$$40. \quad -y - 4 = -1(y + 4)$$