

Basic Factorising #2

Factorise

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|-----|------------|-----|------------|
| 1. | $3k - 9$ | 11. | $5 + 5x$ |
| 2. | $3x + 9$ | 12. | $3x + 9$ |
| 3. | $4x - 8$ | 13. | $4x - 4$ |
| 4. | $x^2 + 2x$ | 14. | $4x + 8$ |
| 5. | $g^2 - 3g$ | 15. | $2x + 2$ |
| 6. | $k^2 + 5k$ | 16. | $2x + 10$ |
| 7. | $5y + 10$ | 17. | $6x + 30$ |
| 8. | $3x + 9$ | 18. | $g^2 + 4g$ |
| 9. | $k^2 + 3k$ | 19. | $x^2 + 4x$ |
| 10. | $x^2 + 3x$ | 20. | $6y - 30$ |

Factorise Fully

21. $2g - 4k$
22. $8x + 20$
23. $-12 - 4k$
24. $6y^2 + 3y$
25. $-3x - 15$
26. $y^2 + y^3$
27. $-2x - 2$
28. $15k + 5$
29. $4x + 2x^2$
30. $-6 - 9k$

Answers: Basic Factorising #2

Factorise

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|-----|--------------|------------|-----|--------------|--------------------------|
| 1. | $3k - 9 =$ | $3(k - 3)$ | 11. | $5 + 5x =$ | $5(1 + x)$ or $5(x + 1)$ |
| 2. | $3x + 9 =$ | $3(x + 3)$ | 12. | $3x + 9 =$ | $3(x + 3)$ |
| 3. | $4x - 8 =$ | $4(x - 2)$ | 13. | $4x - 4 =$ | $4(x - 1)$ |
| 4. | $x^2 + 2x =$ | $x(x + 2)$ | 14. | $4x + 8 =$ | $4(x + 2)$ |
| 5. | $g^2 - 3g =$ | $g(g - 3)$ | 15. | $2x + 2 =$ | $2(x + 1)$ |
| 6. | $k^2 + 5k =$ | $k(k + 5)$ | 16. | $2x + 10 =$ | $2(x + 5)$ |
| 7. | $5y + 10 =$ | $5(y + 2)$ | 17. | $6x + 30 =$ | $6(x + 5)$ |
| 8. | $3x + 9 =$ | $3(x + 3)$ | 18. | $g^2 + 4g =$ | $g(g + 4)$ |
| 9. | $k^2 + 3k =$ | $k(k + 3)$ | 19. | $x^2 + 4x =$ | $x(x + 4)$ |
| 10. | $x^2 + 3x =$ | $x(x + 3)$ | 20. | $6y - 30 =$ | $6(y - 5)$ |

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

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|-----|---------------|--------------|
| 21. | $2g - 4k =$ | $2(g - 2k)$ |
| 22. | $8x + 20 =$ | $4(2x + 5)$ |
| 23. | $-12 - 4k =$ | $-4(3 + k)$ |
| 24. | $6y^2 + 3y =$ | $3y(2y + 1)$ |
| 25. | $-3x - 15 =$ | $-3(x + 5)$ |
| 26. | $y^2 + y^3 =$ | $y^2(1 + y)$ |
| 27. | $-2x - 2 =$ | $-2(x + 1)$ |
| 28. | $15k + 5 =$ | $5(3k + 1)$ |
| 29. | $4x + 2x^2 =$ | $2x(2 + x)$ |
| 30. | $-6 - 9k =$ | $-3(2 + 3k)$ |