Basic Expand Practice #2

Expand

1. $4(x + 4)$

2. $2(x - 3)$

3. $6(x + 4)$

4. $y(3 + y)$

5. $6(y + 5)$

6. $3(y + 2)$

7. $5(x - 5)$

8. $2(x + 5)$

9. $x(x + 4)$

10. $^-5(g + 1)$

11. $^-4(g - 1)$

12. $5(x + 4)$

13. $^-x(x + 1)$

14. $^-6(y + 2)$

15. $y(y + 1)$

16. $^-3(x + 3)$

17. $2(y - 2)$

18. $^-3(y - 3)$

19. $x(x - 2)$

20. $3(x - 5)$

Expand and Simplify

21. $6(k + 2) - 3(k - 2)$

22. $2(x - 3) + 2(x - 5)$

23. $4(4 + k) - 2(k + 5)$

24. $x(x + 2) + 3(x - 5)$

25. $g(g + 3) + g(g - 5)$

26. $2(k - 1) + k(k - 1)$

27. $g(g - 5) - 6(g + 4)$

28. $x(x + 4) - 4(x - 4)$

29. $x(x + 4) + 6(x + 2)$

30. $3(x - 5) + 5(x + 4)$

Answers: Basic Expand Practice #2

Expand

1. $4(x + 4)$ = $4x + 16$ 11. ⁻$4(g - 1)$ = ⁻$4g + 4$

2. $2(x - 3)$ = $2x - 6$ or $2x +$ ⁻6 12. $5(x + 4)$ = $5x + 20$

3. $6(x + 4)$ = $6x + 24$ 13. ⁻$x(x + 1)$ = ⁻$x^2 - x$ or ⁻$x^2 +$ ⁻x

4. $y(3 + y)$ = $3y + y^2$ or $y^2 + 3y$ 14. ⁻$6(y + 2)$ = ⁻$6y - 12$ or ⁻$6y +$ ⁻12

5. $6(y + 5)$ = $6y + 30$ 15. $y(y + 1)$ = $y^2 + y$

6. $3(y + 2)$ = $3y + 6$ 16. ⁻$3(x + 3)$ = ⁻$3x - 9$ or ⁻$3x +$ ⁻9

7. $5(x - 5)$ = $5x - 25$ or $5x +$ ⁻25 17. $2(y - 2)$ = $2y - 4$

8. $2(x + 5)$ = $2x + 10$ 18. ⁻$3(y - 3)$ = ⁻$3y + 9$

9. $x(x + 4)$ = $x^2 + 4x$ 19. $x(x - 2)$ = $x^2 - 2x$ or $x^2 +$ ⁻$2x$

10. ⁻$5(g + 1)$ = ⁻$5g - 5$ or ⁻$5g +$ ⁻5 20. $3(x - 5)$ = $3x - 15$ or $3x +$ ⁻15

Expand and Simplify (answers can be in any order but it is usual to put higher powers first)

21. $6(k + 2) - 3(k - 2)$ = $6k + 12 - 3k + 6$ = $3k + 18$

22. $2(x - 3) + 2(x - 5)$ = $2x - 6 + 2x - 10$ = $4x - 16$

23. $4(4 + k) - 2(k + 5)$ = $16 + 4k - 2k - 10$ = $2k + 6$

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

25. $g(g + 3) + g(g - 5)$ = $g^2 + 3g + g^2 - 5g$ = $2g^2 - 2g$

26. $2(k - 1) + k(k - 1)$ = $2k - 2 + k^2 - 1k$ = $k^2 + k - 2$

27. $g(g - 5) - 6(g + 4)$ = $g^2 - 5g - 6g - 24$ = $g^2 - 11g - 24$

28. $x(x + 4) - 4(x - 4)$ = $x^2 + 4x - 4x + 16$ = $x^2 + 16$

29. $x(x + 4) + 6(x + 2)$ = $x^2 + 4x + 6x + 12$ = $x^2 + 10x + 12$

30. $3(x - 5) + 5(x + 4)$ = $3x - 15 + 5x + 20$ = $8x + 5$