

1. -21 2. 0 3. $\frac{5}{12}$ 4. $88x + 3$
5. 100 6. $\frac{1}{3}$ 7. 51 8. -4
9. $\{-3\}$ 10. 4 11. $\frac{17}{3}$ 12. \emptyset
13. 31 14. 1 15. 5 16. 3

17. a. $\log \left(\frac{(7m^{12})^{3/4}}{(m^8)^{7/2}} \right)$

17. b. $\ln \left(\frac{y}{(x^2 - 121)^3} \right)$

18. $7 \log x + \frac{2}{3} \log y - (4 \log z + 9 \log w)$

No Calculator solutions.

Answer Key Ch. 3 Review Calculator

- | | | | | |
|-----|---|-----------|-----|------------|
| 1. | 1.845 | | 31. | 28.25 |
| 2. | 357 | | 32. | \$ 3234.58 |
| 3. | \$ 18,148.94 | | 33. | 29,799 |
| 4. | 4,923,696 | Year 2026 | 34. | 6,30 |
| 5. | 63.9 | | 35. | 9 yrs |
| 6. | $\log_6 36 = 2$ | | 36. | 9.92 |
| 7. | C | | 37. | D |
| 8. | C | | 38. | 1938.43 |
| 9. | -4 | | 39. | 3.6 |
| 10. | 1.979 | | 40. | 33 |
| 11. | 9.19 | | 41. | D |
| 12. | A | | 42. | A |
| 13. | -1.5686 | | 43. | 5.48 |
| 14. | \$ 26911.75 | | 44. | -1.8839 |
| 15. | $243^{4/5} = 81$ | | 45. | 8 |
| 16. | .555 | | | |
| 17. | B | | | |
| 18. | -2.335 | | | |
| 19. | 7/4 | | | |
| 20. | FALSE | | | |
| 21. | 4 | | | |
| 22. | $\log_6 \frac{(x+7)^7 (x+5)^3}{\sqrt{x}}$ | | | |
| 23. | 2.41 | | | |
| 24. | $x=6$ | | | |
| 25. | C | | | |
| 26. | 18,3258 | | | |
| 27. | 2.5649 | | | |
| 28. | 108,322 | | | |
| 29. | 9/8 | | | |
| 30. | .8210 | | | |