

Answer Key

Challenge: Skills and Applications

1. negative 2. positive 3. positive
4. negative 5. $\frac{16}{49}$ 6. $\frac{1}{40}$ 7. 1,000,000
8. $\frac{4}{25}$ 9. \$1904.60 10. \$2809.47
11. \$1905.73 12. \$2457.92 13. \$2235.88
14. \$2226.76 15. \$2315.26 16. *Sample answer:* Compounding more frequently increases the value of the account slightly; the interest rate affects the value of the account much more than the frequency of compounding does. In this case, compounding six times as frequently only increased the value of the account about \$9 over the 8 years, whereas raising the interest rate by half a percent increased it by close to \$90.