

1. $\frac{2a + 3}{4}$ 2. $\frac{1}{7x}$ 3. $\frac{1}{3}$
 4. $\frac{1}{2}$ 5. $3x$ 6. $\frac{x + 2}{x^2}$
 7. $\frac{2}{3}$ 8. $\frac{2}{b + 4}$ 9. $\frac{1}{m - 7}$
 10. $\frac{w}{w - 7}$ 11. $\frac{a + 1}{5}$ 12. $\frac{m + 3}{m + 2}$
 13. $\frac{c - 4}{c + 3}$ 14. $b + 3$ 15. $\frac{1}{m - 2}$
 16. -1 17. $\frac{-4}{t + 1}$ 18. -2
 19. $-\frac{1}{2}$ 20. $-\frac{1}{v + 5}$ 21. $-\frac{1}{w - 4}$
 22. 36 min 23. 13 min 24. 13 min
 25. $\frac{2r - 1}{r + 5}$ 26. $\frac{7z + 2}{z - 1}$ 27. $\frac{5t - 4}{3t - 1}$
 28. $\frac{4a^2}{2a - 1}$ 29. $\frac{3(z + 4)}{z^3}$ 30. $\frac{2s + 1}{s^2}$
 31. $-\frac{2a + 1}{a + 3}$ 32. $\frac{4 + 3m}{m - 7}$ 33. $\frac{-c(3c + 5)}{5c + 4}$
 34. Answers may vary. Sample: $\frac{3}{(x - 2)(x + 3)}$
 35. a. i. $\frac{2b + 4h}{bh}$ ii. $\frac{2h + 2r}{rh}$
 b. $\frac{4}{9}; \frac{4}{9}$
 36. The student canceled terms instead of factors.
 37. -3 is not in the domain of $\frac{x^2 - 9}{x + 3}$.
 38. $\frac{5w}{5w + 6}$ 39. $\frac{1}{4}$ 40. $\frac{3y}{4(y + 4)}$
 41. $\frac{t + 3}{3(t + 2)}$ 42. $\frac{m - n}{m + 10n}$ 43. $\frac{a - 3b}{a + 4b}$
 44. $\frac{6v - 7w}{3v - 2w}$ 45. Sometimes 46. sometimes
 47. never