

Practice B

For use with pages 646–651

Simplify the expression if possible.

- | | | |
|---|---|--|
| 1. $\frac{7x}{21}$ | 2. $\frac{20x}{28}$ | 3. $\frac{18x^2}{12x}$ |
| 4. $\frac{36x^4}{42x^7}$ | 5. $\frac{-8x}{24x^3}$ | 6. $\frac{48x^5}{18x^2}$ |
| 7. $\frac{x}{15 + x}$ | 8. $\frac{m^2}{m(m + 1)}$ | 9. $\frac{12b(4 - b)}{6b^3}$ |
| 10. $\frac{14x}{7x^2 - 21x^3}$ | 11. $\frac{5x}{x^2 + 3x}$ | 12. $\frac{2x^2 + x}{4x}$ |
| 13. $\frac{x^2 - 1}{6x + 6}$ | 14. $\frac{4x - 12}{x^2 - 9}$ | 15. $\frac{3(x - 7)}{4(7 - x)}$ |
| 16. $\frac{3 - x}{x^2 - 9}$ | 17. $\frac{x^2 + x - 6}{8 - 2x - x^2}$ | 18. $\frac{x^2 + 5x + 4}{3x + 12}$ |
| 19. $\frac{x^2 - 4}{x^2 + 7x + 10}$ | 20. $\frac{x^2 - 13x + 42}{x^2 + 3x + 2}$ | 21. $\frac{x^2 - 3x - 10}{x^2 + 5x + 6}$ |
| 22. $\frac{2x^2 + 5x + 3}{4x^2 + 4x - 3}$ | 23. $\frac{x^2 + 10x + 24}{x^2 - 16}$ | 24. $\frac{x^3 - x^2 - 12x}{x^3 - 9x}$ |
| 25. $\frac{x^3 - 10x^2 + 21x}{x^2 + 2x - 15}$ | | |

Find the quotient.

26. Divide $(a^2 + 6a + 8)$ by $(a + 2)$.
27. Divide $(y^2 - 2y - 3)$ by $(y - 3)$.
28. Divide $(3x^2 - 20x - 7)$ by $(x - 7)$.
29. Divide $(10z^3 + 15z^2)$ by $5z^2$.