

Factor completely.

11. $8x^2 + 22x - 21$

12. $8a^3 + 64b^3$

13. $48x^3 - 120x^2 + 75x$

14. $x^3y^2 - 4x^3 + 8y^2 - 32$

Perform the indicated operations.

15. $\frac{2x^2 + 5x - 3}{x^2 + 3x - 28} \cdot \frac{x^2 + 12x + 35}{4x^2 - 1}$

16. $\frac{3x+5}{x^2+3x+2} - \frac{x-5}{x^2-x-2}$

17. $\frac{3a+4b}{7a-5b} - \frac{4a-9b}{5b-7a}$

18. $\frac{\frac{3}{x} - y}{\frac{2}{y} + x}$

19. Evaluate $\left(\frac{4}{9}\right)^{-3/2}$.