

Find the LCM of each set of polynomials.

18. $24cd, 40a^2c^3d^4, 15abd^3$

20. $x^2 - 9x + 20, x^2 + x - 30$

19. $4x^2y^3, 18xy^4, 10xz^2$

21. $6x^2 + 21x - 12, 4x^2 + 22x + 24$

Simplify each expression.

22. $\frac{5a}{24cf^4} + \frac{a}{36bc^4f^3}$

24. $\frac{5b}{6a} + \frac{3b}{10a^2} + \frac{2}{ab^2}$

26. $\frac{8}{3y} + \frac{2}{9} - \frac{3}{10y^2}$

28. $\frac{8}{x^2 - 6x - 16} + \frac{9}{x^2 - 3x - 40}$

30. $\frac{12}{3y^2 - 10y - 8} - \frac{3}{y^2 - 6y + 8}$

32. $\frac{2x}{4x^2 + 9x + 2} + \frac{3}{2x^2 - 8x - 24}$

23. $\frac{4b}{15x^3y^2} - \frac{3b}{35x^2y^4z}$

25. $\frac{4}{3x} + \frac{8}{x^3} + \frac{2}{5xy}$

27. $\frac{1}{16a} + \frac{5}{12b} - \frac{9}{10b^3}$

29. $\frac{6}{y^2 - 2y - 35} + \frac{4}{y^2 + 9y + 20}$

31. $\frac{6}{2x^2 + 11x - 6} - \frac{8}{x^2 + 3x - 18}$

33. $\frac{4x}{3x^2 + 3x - 18} - \frac{2x}{2x^2 + 11x + 15}$

Simplify each expression.

36. $\frac{\frac{2}{x-3} + \frac{3x}{x^2-9}}{\frac{3}{x+3} - \frac{4x}{x^2-9}}$

38. $\frac{\frac{5}{x+6} - \frac{2x}{2x-1}}{\frac{x}{2x-1} + \frac{4}{x+6}}$

37. $\frac{\frac{4}{x+5} + \frac{9}{x-6}}{\frac{5}{x-6} - \frac{8}{x+5}}$

39. $\frac{\frac{8}{x-9} - \frac{x}{3x+2}}{\frac{3}{3x+2} + \frac{4x}{x-9}}$