

Section 7.2

Find the LCM of each monomial or polynomial expression.

1) $8x^2y, 24xy^3$

2) $30a^3b, 40ab$

3) $2x + 4, x + 2$

4) $x^2 - 16, x + 4$

5) $x^2 - 2x - 15, x^2 + 5x + 6$

6) $x + 2, x + 3$

Simplify each expression. (Like Denominators)

7) $\frac{x + 6y}{18y} + \frac{x + 5y}{18y}$

8) $\frac{4x - 3y}{10x} - \frac{x + 3y}{10x}$

9) $\frac{x + 5y}{8yx^3} - \frac{x - 4y}{8yx^3}$

10) $\frac{x - 1}{x - 8} - \frac{x + 3}{x - 8}$

11) $\frac{4v + 2}{4(v - 5)} + \frac{v - 3}{4(v - 5)}$

12) $\frac{b + 5}{b^2 - 11b + 5} + \frac{b + 4}{b^2 - 11b + 5}$

Simplify each expression. (Unlike Denominators-Monomials)

13) $\frac{4y}{4y^2} - \frac{5x}{5xy}$

14) $\frac{6}{3} - \frac{6}{5x}$

15) $\frac{2m}{3n^3} - \frac{4n}{6mn^2}$

16) $\frac{2}{6} - \frac{5x}{3xy}$

17) $\frac{2}{5v^2} + \frac{3}{6u^2}$

18) $\frac{5}{2u^2v} - \frac{3v}{5u^2v}$

Simplify each expression. (Unlike Denominators-Polynomials)

$$19) \frac{6}{x-4} - \frac{3x}{x+3}$$

$$20) \frac{4n}{3} - \frac{n+3}{6n+6}$$

$$21) \frac{5}{n-4} - \frac{3n}{n^2-7n+12}$$

$$22) \frac{3}{n-3} + \frac{2n}{n^2-9}$$

$$23) \frac{6}{y^2-2y-35} + \frac{4}{y^2+9y+20}$$

$$24) \frac{5}{a-4} + \frac{6}{a-3}$$

Simplify each expression. (Complex Fractions)

$$25) \frac{\frac{m}{5} + \frac{m}{2}}{\frac{2}{m^2}}$$

$$26) \frac{\frac{1}{3x} + \frac{36}{x^2}}{\frac{36}{x^2}}$$

$$27) \frac{\frac{36}{x}}{\frac{x+3}{x} + \frac{x+3}{x^2}}$$

$$28) \frac{\frac{a-3}{4a} - \frac{a-3}{4}}{\frac{a-3}{4a}}$$

$$29) \frac{\frac{3u-15}{3}}{\frac{u-5}{3} + \frac{u-5}{u+4}}$$

$$30) \frac{\frac{a^2-4a}{3}}{\frac{3}{a} + \frac{3}{a}}$$