

Finding the LCM of Monomials

Find the LCM of each.

1) $12x, 36y$

2) $24y^3x, 40x^3y$

3) $16y^2, 24y^2$

4) $30a^3b, 40a^3$

5) $10b^2a^2, 14a^2$

6) $27ab^2, 18b$

7) $18y^3, 32y$

8) $20n^2, 30m^2n^2$

9) $24b^3, 12ab^2$

10) $40xy, 32x^2y$

11) $14xy, 21y^2, 28y$

12) $28a^2, 40a, 24a$

13) $36, 27m^2, 18$

14) $32y^4, 40xy^2, 20x^2y^2$

15) $20, 32x, 12$

16) $27u^4, 18u^2, 27u^2$

17) $35y^2, 21xy, 14y$

18) $32m^2, 40mn, 24m$

19) $14yx, 38x^2, 28x^2$

20) $40y, 30x^2y, 20y^3$

Find the GCF of each set of monomials.

1. $12x, 40x^2$

2. $18m, 45mn$

3. $14n, 42n^2$

4. $4st, 10s$

5. $5ab, 6b^2$

6. $14b, 56b^2$

7. $36a^3b, 56ab^2$

8. $30a^3b^2, 24a^2b$

9. $32mn^2, 16n, 12n^3$

Find the greatest common factor for each pair of monomials.

1) $4xy, 2x^2$

2) $12x^2yz, 3xy^2$

3) $16x^3y, 8x^2$

4) $a^2b, 4ab^2$

5) $15m^2n, 25m^3n^2$

6) $12a^2b^2c^2, 20abc$

7) p^2q^2, pqr

8) $8xyz, 2x^2y^2z$

9) $22m^5n^3, 11m^2n^4$

10) $18ab, 9ab$

Evaluating Algebraic Expressions Using Integer Values

Evaluate each using the values given.

1) $x - 5 - z$; use $x = -6$, and $z = 3$

2) $xz - z$; use $x = -2$, and $z = -5$

3) $xz - z$; use $x = -6$, and $z = -5$

4) $m(p + q)$; use $m = 2$, $p = -4$, and $q = -4$

5) p^2n ; use $n = 5$, and $p = 2$

6) $x + y + z$; use $x = 4$, $y = 4$, and $z = 6$

7) $k(h - j) + h$; use $h = 5$, $j = -4$, and $k = 5$

8) $z + y - (-4 + y)$; use $y = 1$, and $z = 4$

9) $y \div 3 + z + x$; use $x = -4$, $y = 3$, and $z = 4$

10) $(-3)^2 + y + z$; use $y = -5$, and $z = -5$

13) $(5 - z)(x + 3) - x$; use $x = 6$, and $z = 3$

14) $5h - \left(\frac{h}{5} - k\right)$; use $h = 5$, and $k = 1$

15) $y\left(\left(\frac{x}{4}\right)^3 + y\right)$; use $x = 4$, and $y = 4$

16) $r + q - q + p^2$; use $p = 5$, $q = 4$, and $r = 4$

17) $\frac{x}{5} + 6 - 1 + y^3$; use $x = 5$, and $y = 1$

18) $x^2\left(y + \frac{x}{5} + 4\right)$; use $x = -5$, and $y = -5$

19) $y^3 + yz + z + y$; use $y = -2$, and $z = 6$

20) $x - \left(x^2 + x - \frac{y}{4}\right)$; use $x = -6$, and $y = 4$