

Long Division Answer Key

Don't Be Short with Us

Find each quotient using polynomial long division.

1. $\frac{2x^5+4x^4+6x^3+4x^2}{x^4+3x^2}$

$$2x + 4$$

6. $\frac{3x^3+20x^2+27x+90}{x+6}$

$$3x^2 + 2x + 15$$

2. $\frac{4x^3+14x^2+31x+75}{4x^2+2x+25}$

$$x + 3$$

7. $\frac{3x^3-15x+12}{3x^2-3}$

$$x - 4$$

3. $\frac{-4x^4-32x^3-60x^2-12x-36}{x+3}$

$$-4x^3 - 20x^2 - 12$$

8. $\frac{x^3+12x^2+25x+50}{x+10}$

$$x^2 + 2x + 5$$

4. $\frac{3x^2+19x+20}{3x+4}$

$$x + 5$$

9. $\frac{4x^2+20x+24}{4x+8}$

$$x + 3$$

5. $\frac{x^6+6x^5+5x^4+15x+75}{x+5}$

$$x^5 + x^4 + 15$$

10. $\frac{x^3+2x^2+6x+5}{x+1}$

$$x^2 + x + 5$$

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