

Unit 8.2 Long Division of Polynomials advanced PRACTICE

Divide.

1) $(-32 - 43n - 6n^2 + 5n^3) \div (5n + 4)$

2) $(9p^3 + 9p^2 - 5) \div (9p + 9)$

3) $(24b^5 - 39b^3 + 9b^2 - 6b - 20) \div (3b + 3)$

4) $(20r^3 - 8r^2 - 9) \div (5r - 2)$

5) $(8n^5 + 41n^4 - 51n^3 + n^2 + 65n + 17) \div (8n + 1)$

6) $(4x^5 - 23x^4 + 2x^3 + 30x^2 + 11x + 9) \div (4x + 1)$

7) $(10m^3 - 9m^2 + 9m + 2) \div (10m + 1)$

8) $(-47x^3 + 10x^5 - 74x^4 - 7x^2 - 3x - 39) \div (-8 + x)$

9) $(10x^4 - 5x^3 - 90x + 54) \div (10x - 5)$

10) $(6x^3 - 33x^2 + 3x + 15) \div (6x - 3)$

$$11) \quad (10x^3 + 27x^2 + 14x + 5) \div (x^2 + 2x)$$

$$12) \quad (5x^4 + 14x^3 + 9x) \div (x^2 + 3x)$$

$$13) \quad (2x^4 + 2x^3 - 10x - 9) \div (x^3 + x^2 - 5)$$

$$14) \quad -x^3 + 2x^2 - 2x + 3) \div (x^2 - 1)$$

$$15) \quad (4x^3 - 7x^2 - x + 10) \div (x^2 - 3)$$

$$16) \quad (x^4 + 2x^2 + 3x + 6) \div (x^3 - 3)$$