



# Polynomial Long Division

Version 1

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Score: \_\_\_\_\_

Direction: Divide the polynomials using "Long Method". Show all your work in the space provided.

1)  $(2x^4 - 4x^3 + x^2 - x + 1) \div (x - 2)$

2)  $(x^5 + x^2 - x + 4) \div (x + 1)$

3)  $(x^5 - 3x^3 + 6x^2 - 12) \div (x + 3)$



Name: \_\_\_\_\_

Date: \_\_\_\_\_

Score: \_\_\_\_\_

Direction: Divide the polynomials using "Long Method". Show all your work in the space provided.

1)  $(2x^4 - 4x^3 + x^2 - x + 1) \div (x - 2)$

$$2x^3 + x + 1 + \frac{3}{x - 2}$$

2)  $(x^5 + x^2 - x + 4) \div (x + 1)$

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

3)  $(x^5 - 3x^3 + 6x^2 - 12) \div (x + 3)$

$$x^4 - 3x^3 + 6x^2 - 12x + 36 - \frac{120}{x + 3}$$