

Name \_\_\_\_\_ Student No. \_\_\_\_ G \_\_\_\_ / \_\_\_\_ Date: \_\_\_\_\_ Score: \_\_\_\_\_  
Nickname: \_\_\_\_\_ Worksheet No.: \_\_\_\_\_

## Remainder Theorem

### A. Use remainder theorem to solve for the unknown variable.

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

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

Remainder: 10

Remainder: 0

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

7)  $(-x^2 - 3x - 2) \div (-x - 2)$

Remainder: 360

Remainder: 0

3)  $(2x^4 - 5x^3 + 5x - 2) \div (2x - 1)$

8)  $(-2x^2 - 3x - 1) \div (-x - 1)$

Remainder: 0

Remainder: 0

4)  $(2x^4 + 11x^3 + 21x^2 + 16x + 4) \div (x + 1)$

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

Remainder: 9720

Remainder: 0

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

10)  $(-2x^2 - 5x - 2) \div (2x - 2)$

Remainder: 20

Remainder: -9