

Remainder Theorem

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

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

6) $(x^3 + 4x^2 - 3x - 18) \div (x - 1)$

Remainder: 0

Remainder: -16

2) $(2x^3 + 4x^2 - 6x) \div (2x + 1)$

7) $(-2x^4 - 5x^3 + 3x^2 + 8x - 4) \div (x)$

Remainder: 8

Remainder: -4

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

8) $(-2x^3 - 4x^2 - 2x) \div (x + 1)$

Remainder: -1

Remainder: 0

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

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

Remainder: 168

Remainder: 6

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

10) $(-2x^2 + 3x - 1) \div (x - 1)$

Remainder: 56

Remainder: 0