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:

Remainder:

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

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

Remainder:

Remainder:

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

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

Remainder:

Remainder:

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

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

Remainder:

Remainder:

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

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

Remainder:

Remainder: