Remainder Theorem

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

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

6)
$$(-8x^4 - 32x^3 - 46x^2 - 28x - 6) \div (2x)$$

Remainder:

Remainder:

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

7)
$$(-2x^2 - 3x) \div (2x - 1)$$

Remainder:

Remainder:

3)
$$(4x^4 + 8x^3 - 13x^2 - 2x + 3) \div (1 - x)$$

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

Remainder:

Remainder:

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

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

Remainder:

Remainder:

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

10)
$$(2x^4 + 8x^3 + 4x^2 - 8x - 6) \div (-x - 2)$$

Remainder:

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