

## C12 - 3.2 - Factor/Remainder Theorem Synthetic Long Division WS

Is the following a factor of the polynomial. Test by Inspection. Factor using synthetic or long division.

$$(x - 1) \quad x^3 - 2x^2 - 5x + 6$$

$$(x + 3) \quad x^3 + x^2 - 4x - 4$$

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

$$(x - 3) \quad x^3 + x^2 - 4x - 4$$

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

$$(x + 3) \quad x^3 + 6x^2 + 12x + 8$$

$$(x - 2) \quad x^3 - 2x^2 - 5x + 7$$

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

$$(x - 3) \quad x^3 - 2x^2 - 5x - 2$$

$$(x + 2) \quad x^3 + x^2 - 4x + 2$$