

## C12 - 3.1 - Long Division WS

Divide using long division and state the division statement and the multiplication statement. Find Remainder.

$$3 \overline{) 36}$$

$$3 \overline{) 35}$$

$$(x - 2) \overline{) x^2 + 2x - 8}$$

$$(x - 3) \overline{) x^2 + 4x - 22}$$

$$(x - 3) \overline{) x^3 - 2x^2 - 5x + 6} \quad \text{Fully Factor}$$

$$(x + 2) \overline{) 3x^2 + 5x - 2}$$

$$(x + 4) \overline{) 2x^2 + 9x - 1}$$

$$(x + 5) \overline{) x^2 + 9x + 20}$$

## C12 - 3.1 - Synthetic Division WS

Divide using synthetic division and state the division statement and the multiplication statement. Fully Factor.

$$\frac{x^2 + 2x - 8}{x - 2}$$

$$\frac{x^3 - 2x^2 - 5x + 6}{x + 2}$$

$$\frac{x^3 + 2x^2 - 5x - 7}{x + 2}$$

$$\frac{x^3 + 2x^2 - 4x - 8}{x + 2}$$

$$\frac{x^3 + x^2 - 4x - 4}{x - 2}$$

$$\frac{x^3 + 6x^2 + 8}{x + 3}$$

$$\frac{x^3 - 2x^2 - 5x + 8}{(x - 3)}$$