

3-step factoring CC style ☺

For the very strong – try these: FACTOR COMPLETELY

1.  $(x^3 - 25x^3) - x^2 + 25$

$$x^3(x^2 - 25) - 1(x^2 - 25)$$

$$(x^2 - 25)(x^3 - 1)$$

$$(x - 5)(x + 5)(x^3 - 1)$$

2.  $2x^4 + 4x^3 - 250x - 500$

$$2(x^4 + 2x^3 - 125x - 250)$$

$$2(x^3(x + 2) - 125(x + 2))$$

$$2(x + 2)(x^3 - 125)$$

3.  $2x^4 - 10x^3 + 16x - 80$

$$2(x^4 - 5x^3 + 8x - 40)$$

$$2(x^3(x - 5) + 8(x - 5))$$

$$2(x - 5)(x^3 + 8)$$