

Bellwork: Factor

* Be sure to factor out GCF first.
(if there is one)

① $4x^2 - 100$

$$4(x^2 - 25)$$

$$4(x+5)(x-5)$$

② $3x^2 - 12x - 63$

$$3(x^2 - 4x - 21)$$

$$3(x-7)(x+3)$$

③ $12x^2 + 34x + 20$

$$2(6x^2 + 17x + 10)$$

$$3 \cdot 2$$
$$1 \cdot 6$$

$$10 \cdot 1$$
$$2 \cdot 5$$

$$2(6x+5)(x+2)$$

$$\begin{array}{r} 60 \\ 12 \times 5 \\ 17 \end{array}$$

④ $-6x^2 - 22x + 40$

when a is negative,
factor out the neg.

$$-2(3x^2 + 11x - 20)$$

$$3 \cdot 1$$

$$4 \cdot 5$$

$$2 \cdot 10$$

$$1 \cdot 20$$

$$-2(3x-4)(x+5)$$

$$\begin{array}{r} 60 \\ 15 \times -4 \\ 11 \end{array}$$