

Please go into groups & discuss homework.

More factoring today

Summative Quiz Thursday!

$$1x^2 - 3x - 54$$

no GCF

$$(x - 9)(x + 6)$$

$$2k^2 - 8k - 24$$

$$2(k^2 - 4k - 12)$$

$$2(k - 6)(k + 2)$$

Grouping, LC > 1 ^{trinomials}

$$20x^3 + 5x^2 + 32x + 8$$

$$5x^2(4x+1) + 8(4x+1)$$

$$(4x+1)(5x^2+8)$$

Ex. $12n^3 - 9n^2 - 8n + 6$

no
overall
GCF

$$3n^2(4n-3) - 2(4n-3)$$

$$(4n-3)(3n^2-2)$$

$$2x. \quad 6x^3 + 21x^2 - 4x - 14$$

$$3x^2(2x+7) - 2(2x+7)$$

$$(2x+7)(3x^2-2)$$

multiply out to check

$$6x^3 + 21x^2 - 4x - 14 \quad \checkmark$$

$$5x^2 + 4x + 1$$

no gcf

$$-5x^2$$

$$5x + -1x = 4x$$

trinomial
Leading
Coeff $\neq 1$

Substitute

$$5x^2 + 5x - 1x - 1$$

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

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

Factor:

$$3x^2 - 14x + 16$$

↓

$$48x^2$$

$$-6x \quad -8x$$

$$3x^2 - 6x - 8x + 16$$

$$3x(x-2) - 8(x-2)$$

no gcf
LC ≠ 1

$$\boxed{(x-2)(3x-8)}$$