

Alg I 8.2 notes.notebook

8.2 Multiplying and Factoring

The BIG idea...

Use the distributive property to multiply a monomial and a polynomial

Simplify. Write in standard form.

$$1) 4x(3x - 7)$$

$$2) 2x^2(4 - 5x)$$

$$3) 3a(4a^2 + 5a - 1)$$

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

The other BIG idea...

Factoring a polynomial reverses multiplication. To factor, start by finding the greatest common factor (GCF).

Find the GCF of the monomials.

$$5) 16 \text{ and } 28$$

$$6) 12x^2 - 16x$$

$$7) 14y^3 + 42y^2 - 28y$$

Factor.

$$8) 8x - 12$$

$$9) 9x^3 + 15x^2$$

$$10) 10x^4 + 15x^3 - 5x^2 - 60x$$

$$11) a^3b + a^2b^2$$