2.4: Distributive Property

Recall: $-(3x^2 - 5x)$

Definition of the Distributive Property:

When a polynomial is **expanded**, each term of the polynomial is multiplied or divided by the constant.

Examples:

1. Expand the following:

a) $2(3x^2 - 5x)$

b) $-2(3x^2 - 5x)$

2. Expand the following and then simplify by collecting like terms:

a) $-3(6x^2 + 5) + 4(3x^2 + x - 2)$

b) $-4(-3b^2 - b + 4) - 2(6b + 3)$

c) $\dfrac{3}{5}\left(\dfrac{1}{2}y^2 - \dfrac{3}{4}y + \dfrac{1}{2}\right) - \dfrac{1}{2}\left(\dfrac{1}{5}y^2 + \dfrac{5}{4}y - \dfrac{3}{5}\right)$

Homework: p.263-265 #[6, 10-12](odd), 14, 15, B16