I. Polynomial: an algebraic expression in which all terms are of the form, "ax^n"

$$e.g., \quad 2x^3 \qquad \text{one term polynomial}$$
$$-x^2 + 5 \qquad \text{two} \quad " \qquad "$$
$$3x^4 - 0.2x + \tfrac{1}{2} \qquad \text{three} \quad " \qquad "$$
$$\text{etc.}$$

II. Like Terms & Coefficients:

"like (or similar) terms" contain the same variable raised to the same power, while the constant # which is multiplied by the variable part is known as a "coefficient" (*i.e.*, in the expression "ax^n" the number "a" is its coefficient)...

III. Degree of a polynomial:

the term "ax^n" is said to be of degree "n" and the highest powered term (*i.e.*, largest exponent) determines the degree of the entire polynomial

IV. Examples (pp.341-342): Problems #2-46(even)

V. Simplifying Similar Terms:

similar terms may be combined (*i.e.*, simplified using either ±), while unlike terms cannot...

$$e.g., \quad 6x + 2x = \underline{}$$

$$-3x^2 - 0.2x^2 = \underline{}$$

$$-3x^2 + 2x \quad \underline{}$$

note: the constants $6, 2, -3, -0.2$, etc. are known as $\underline{}$

VI. Examples (pp.342-343): Problems #48-88(even)

HW: pp.341-343 / Problems #1,3,9,11,13,15,17,
23-45(odd),47-87(odd)

Read pp.345-347 (section 5.4)