Sample Vocabulary Notecards
(updated: 9/5/2022)

Learning vocabulary is the first step towards mastering the course material. "Vocabulary" means terminology, formulas, and facts. The most effective way to learn vocabulary is to make a notecard for each vocabulary item. You can use physical cards, like 3 by 5 inch index cards, or you can use some equivalent electronic medium.

A complete notecard must include: the term, formula or fact name; the definition of the term or statement of the fact; and at least one example illustrating the definition or fact. Here are some examples.

FRONT of card, or LEFT column of list: *term, formula or fact name*	**BACK of card, or RIGHT column:** *definition, statement, example(s)*
quadratic polynomial	A **quadratic polynomial** is an expression of the form $ax^2 + bx + c$, where *x* is a variable and *a,b,c* are constants. Example: $2x^2 - 3x + 7$ is a quadratic polynomial with $a = 2,\ b =- 3,\ c = 7$.
quadratic formula	**The quadratic formula** If $ax^2 + bx + c = 0$ and $a \neq 0$ then $$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}.$$ If $b^2 - 4ac < 0$, then there are no real solutions. Example: For $x^2 + 2x - 3 = 0$, use $a = 1,\ b = 2, c =- 3$ to get $x = \frac{-2 \pm \sqrt{4+12}}{2} =- 1 \pm 2 = -3, 1.$