1-2 Videos Guide

1-2a

- Types of functions
  - Constant
  - Linear
  - Squaring
  - Square root
  - Cubing
  - Cube root
  - Reciprocal
  - Reciprocal square
  - Absolute value
  - Greatest integer
  - Trigonometric

1-2b

Exercises:

- The manager of a weekend flea market knows from past experience that if he charges x dollars for a rental space at the market, then the number y of spaces he can rent is given by the equation $y = 200 - 4x$.
  (a) Sketch a graph of this linear function. (Remember that the rental charge per space and the number of spaces rented can't be negative quantities.)
  (b) What do the slope, the y-intercept, and the x-intercept of the graph represent?
- The manager of a furniture factory finds that it costs $2200 to manufacture 100 chairs in one day and $4800 to produce 300 chairs in one day.
  (a) Express the cost as a function of the number of chairs produced, assuming that it is linear. Then sketch the graph.
  (b) What is the slope of the graph and what does it represent?
  (c) What is the y-intercept of the graph and what does it represent?