Study Guide
4.4 – 4.5 Quiz
Slope and Graphing Using Slope – Intercept Form

4.4: Slope

- Be able to find the slope of the line that passes through a pair of points. Also be able to identify when it is zero vs. undefined.

Ex: (–2, –1) and (4, 5)

Ex: (3, –2) and (3, 6)

Ex: (–10, –2) and (–8, 8)

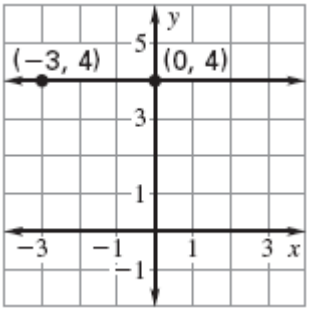
Ex: (–9, 1) and (1, 1)

Ex: (8, 2) and (4, 1)

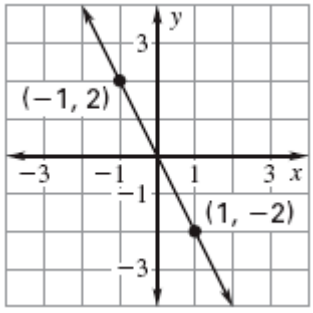
Ex: (12, 9) and (6, 6)

- Be able to find the slope of a graphed line. *Be able to identify when it is positive, negative, zero and undefined.

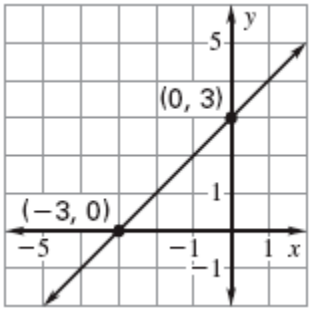
Ex:



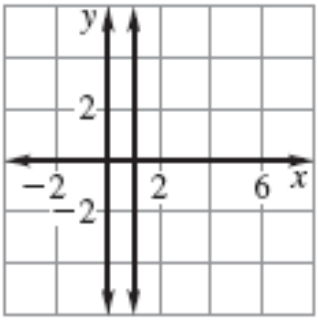
Ex:



Ex:



Ex:



- Apply the slope formula to find a missing coordinate of an ordered pair:

Ex: $(0, y)\ (2, 7)\quad m = \frac{1}{2}$ **Ex:** $(x, -2)\ (1, 7)\ m = 3$

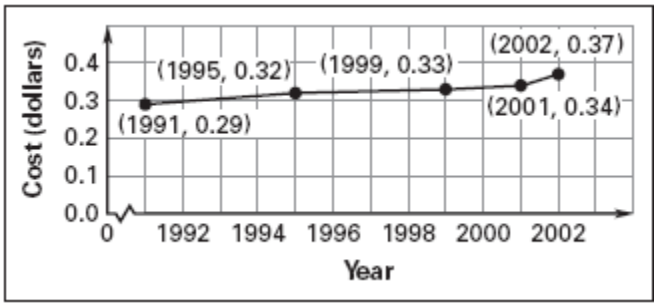
- Be able to apply slope to real-world problems to find rate of change:

Ex: The graph shows the cost (in dollars) to mail a letter that weighs one ounce during certain years.

a. Find the rates of change for each interval showing the change in cost per year of postage.

b. Determine the time interval during which the cost to mail a one-ounce letter showed the greatest rate of change.

c. Determine the time interval during which the cost to mail a one-ounce letter showed the least rate of change.



4.5: Graping Using Slope – Intercept Form

- Be able to rewrite an equation so it is in slope – intercept form and identify the slope and y – intercept:

Ex: $3x - 3y = 12$ **Ex:** $y - 5x = -3$ **Ex:** $x + 4y = 6$

- Be able to graph using slope – intercept form

Ex: $y = 5x + 1$ **Ex:** $y = -2x - 3$ **Ex:** $y = -\frac{3}{4}x + 1.5$