Date: 01/10/2017 Name:\_\_\_\_\_\_\_\_\_\_\_\_\_

*========****Review Chapter 8 -Graphing lines*** *========*

For two points (x1,y1), (x2,y2), write the formulas for

1. Distance between them:
2. Slope of the line connecting those two points:
3. Coordinates of the midpoint:

Same equation can be written in different forms:

1. **Point-slope form**

E.g.

Infinite number of point-slope form

1. **Standard form**

Ax + By = C

Horizontal lines:

Vertical lines:

1. **Slope-intercept form**

y=mx + b

m: slope

b: y-coordinate of the y-intercept

Slope is **positive**: the line goes \_\_\_\_\_ as it goes from left to right.

Slope is **negative**: the line goes \_\_\_\_\_ as it goes from left to right.

Slope is **0**: the line is \_\_\_\_\_ .

Slope is **undefined**: the line is \_\_\_\_\_.

P242: 8.26

(a)

(b)

P248: 8.38

*========* ***Chapter 9 Inequalities****========*

Basic rules to manipulate inequalities:

1. If a>b and b>c, then a>c. (inequality chain: a>b>c)
2. Addition: If x>y, then x+a > y+a
3. Multiplied by positive number: If x>y and **a > 0**, then xa > ya.
4. Multiplied by negative number: If x>y and **b < 0**, then xb < yb. (**reverse the sign**)
5. Reciprocal: if x>y>0, then $\frac{1}{x}$< $\frac{1}{y}$

 if 0>x>y, then $\frac{1}{x}$< $\frac{1}{y}$

1. Exponents: if $x>y\geq 0, a>0$, then $x^{a}$>$y^{a}$

*========* ***9.2 Which is greater?*** *========*

P260: 9.9 (a)

(b)

(c)

9.10

9.11

*========* ***9.3 Linear Inequalities*** *========*

**Interval notation**

P265: 9.13 (a)

(b)

9.14 (a)

(b)

(c)

***===============Homework===============***

*Read the summary and answer the following questions.*

P248: 8.37

8.44

8.46

P259: 9.1.1

9.1.5

P264: 9.2.2

9.2.3

9.2.4 (a)

P268: 9.3.1 (a)

(c)

9.3.5