

**USE QUADRULED PAPER FOR PLOTTING**

**Sec 3.1 Reading Graphs, Plotting Points and Scaling Graphs**

1. Draw a rectangular coordinate system, number the axes appropriately, and plot these two points: (-200, 450) and (25, 150).
2. Identify the four quadrants and the origin on the coordinate system you just drew in problem 1.

DO THESE PROBLEMS (Use quadruled paper) Sec 3.1: 21, 24, 25, 27, 31,32,41,44

---

**Sec 3.2 Graphing Linear Equations**

1. Write the two general forms of a linear equation discussed in section 3.2
2. How many ordered pairs are required to plot a straight line?
3. Give me an example of an ordered pair that would satisfy this equation:  $4x + 2y = 12$

DO THESE PROBLEMS: Sec 3.2: 21,22,23,24, 27,30,31,37,39,43,53,55,56

---

**Sec 3.3 Graphing and Intercepts**

1. The point at which a graph crosses the y-axis is called the \_\_\_\_\_.
2. The point at which a graph crosses the x-axis is called the \_\_\_\_\_.
3. Finish this sentence : " To find the y-intercept of an equations graph, replace....."
4. Finish this sentence : " To find the x-intercept of an equations graph, replace....."
5. What is the general form of an equation for a vertical line?
6. What is the general form of an equation for a horizontal line?

DO THESE PROBLEMS: Sec 3.3:16, 21, 25, 30,31, 43, 49, 53,55, 63,65

---

**Sec 3.4 RATES**

1. State the definition of a RATE.
2. Give three everyday examples of rates.

DO THESE PROBLEMS: Sec 3.4: 7, 8, 11, 15, 29,31,33

---

**Sec 3.5 SLOPE**

1. On page 183, the text discusses two digitizing machines; the DL-1500 and the APT-1200. Study the text then state the digitizing rate of each machine and tell me which machine is the fastest.
2. What is the definition of slope?
3. What is the slope of a horizontal line?
4. What is the slope of a vertical line?

DO THESE PROBLEMS: Sec 3.5: 11, 16,19,22, 25, 26, 27, 30,31, 39,41,45,48

---

**3.6 SLOPE INTERCEPT FORM.**

1. Refer to the DL-1500 table on page 195. The digitization rate shown in the example is calculated from the first two data points in the table. Calculate the rate using the last two points in the table.
2. State the form of the slope-intercept equation.
3. The intercept refers to the point where the line crosses which axis?
4. If I were to give you an equation such as  $y = \frac{3}{2}x + 7$  then  $\frac{3}{2}$  would be the slope and the numerator (3) would be the rise while the denominator (2) would be the run. Identify the slope, the rise and the run in the following equation:  $y = 8x + 5$ .

DO THESE PROBLEMS. Sec 3.6: 7,9,17, 19,20,23,29,35,39,41,43,45

---

**3.7 POINT-SLOPE FORM**

1. Write a point-slope equation for a line with slope m and containing a point (a,b)
2. Convert this point-slope equation  $y - 1 = \frac{1}{2}(x - 3)$  to a slope intercept equation.

DO THESE PROBLEMS: Sec 3.7: 13, 18,23, 27, 29,33,35,39,41,43,51,55

---