

Coordinate Plane Worksheet:

- 1) Graph the equation of the line. Label and assign values to all axes.

$$(-4, -4), m = 0$$

- 2) The dollar cost, as a function of time t in hours, for computer repair is given by $R(t) = 50t + 35$.

- What is the slope?
- In a well-structured sentence, explain what the slope represents in the context of the problem.
- What is the y-intercept?
- In a well-structured sentence, explain what the y-intercept represents in the context of the problem.

- 3) A real estate office handles an apartment complex with 50 units. When the rent per unit is \$580 per month, all 50 units are occupied. However, when the rent is \$625 per month, the average number of occupied units drops to 47 units. Assume that the relationship between the monthly rent p and the demand x is linear.

- Represent the given information as two ordered pairs of the form (x, p) .
- Write a linear equation in slope intercept form that relates the monthly rent p to the demand x .

Use the equation from part (b) to predict the number of units occupied if the rent is raised to \$655.