**Interpreting Slope and y-Intercept in Context**

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Slope:

y-intercept:

Examples:

1. The equation C=50+1.5n represents a pay plan offered to employees who collect credit card applications. What do the numbers in the rule tell you about the relationship between daily pay and the number of credit card applications collected?
2. The equation P=5x-50 represents the profit the student council made by throwing a school dance. What do the numbers in the rule tell you about the relationship between number of tickets (x) and profit (P)?
3. The equation C=100+75x represents the cost of cable television. What do the numbers in the rule tell you about the relationship between the number of months you pay for cable TV and the total cost of having cable TV.
4. In the graph below the x variable represents time in hours and the y variable represents the distance in miles. What is the slope and y-intercept and what could they represent in this context?



DISTANCE (MILES)

TIME (HOURS)

Independent Practice

1. The equation C=x+8 represents the cost of going to the state fair. What do the numbers in the rule tell you about the relationship between the number of tickets, x, purchased and the cost of going to the state fair?
2. The equation y=10 +.05x represents the cost of a cell phone bill. What do the numbers in the rule tell you about the relationship between the number of minutes, x, the customer talked and the total cost of the cell phone bill?
3. The equation C=0.50x+2.50 represents the cost of a taxi ride. What do the numbers in the rule tell you about the relationship between the number of miles, x, the taxi traveled and the total cost of the taxi ride?
4. In the graph below the x axis represents time in months and the y axis represents money in dollars. What is the slope and y-intercept and what could the y-intercept and slope of this graph represent in this context?



DOLLARS

TIME (MONTHS)