Name _____ Date_____

Latasha wants to save money for the purchase of an MP3 player. The equation $T = 5w + 10$ represents the total amount of money, in dollars, Latasha can save after w weeks.

1. Using the equation, make a table to represent the relationship between the number of weeks and the total amount of money saved, and then graph your data.

Number of Weeks (w)	Total Saved (in dollars, T)

Latasha's Savings

2. How does the *total amount saved* change in relation to the *number of weeks*?

3. How does the equation show the relationship between the *total amount saved* and the *number of weeks*?

Name _____ Date_____

Lisa is going on a long-distance bike ride with her friends. They will ride at a rate of 10 miles every hour.

1. Write an equation that relates the distance, *D*, that Lisa travels to the number of hours, *h*, she has ridden.

2. Identify and describe the independent and dependent variables in your equation.

Name _____ Date_____

A coffee storage bin contains 1500 grams of coffee beans. To make a cup of coffee, *n* grams of coffee beans are removed.

1. Write an equation to model the relationship between the quantity of coffee beans removed, *n*, and the quantity of coffee beans remaining in the storage bin, *q*.

2. Identify the dependent variable in your equation and explain why it is dependent.

A manual coffee grinder holds 200 grams of coffee and grinds 2 grams every time the crank is turned.
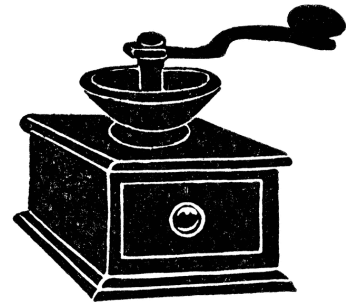
3. Write an equation to show the relationship between the number of times the crank is turned, *t*, and the amount of coffee remaining, *c*.

4. Identify the independent variable in your equation and explain why it is independent.