2. Graph the relationship between amount of money on the card and number of rides.

3. How many rides can Noah take before the card runs out of money? Where do you see this number of rides on your graph?

9.3: Travel Habits in July

Here is a graph that shows the amount on Han's fare card for every day of last July.
Lesson 9: Slopes Don't Have to be Positive

Let's find out what a negative slope means.

9.1: Which One Doesn't Belong: Odd Line Out

Which line doesn't belong?

9.2: Stand Clear of the Closing Doors, Please

Noah put $40 on his fare card. Every time he rides public transportation, $2.50 is subtracted from the amount available on his card.

1. How much money, in dollars, is available on his card after he takes
   a. 0 rides?
   b. 1 ride?
   c. 2 rides?
   d. x rides?
1. Describe what happened with the amount on Han's fare card in July.

2. Plot and label 3 different points on the line.

3. Write an equation that represents the amount on the card in July, $y$, after $x$ days.

4. What value makes sense for the slope of the line that represents the amounts on Han's fare card in July?

Are you ready for more?
Let's say you have taken out a loan and are paying it back. Which of the following graphs have positive slope and which have negative slope?

1. Amount paid on the vertical axis and time since payments started on the horizontal axis.

2. Amount owed on the vertical axis and time remaining until loan is paid off on the horizontal axis.

3. Amount paid on the vertical axis and time remaining until loan is paid off on the horizontal axis.