



Statistics

Slopes and Intercepts

Algebra I


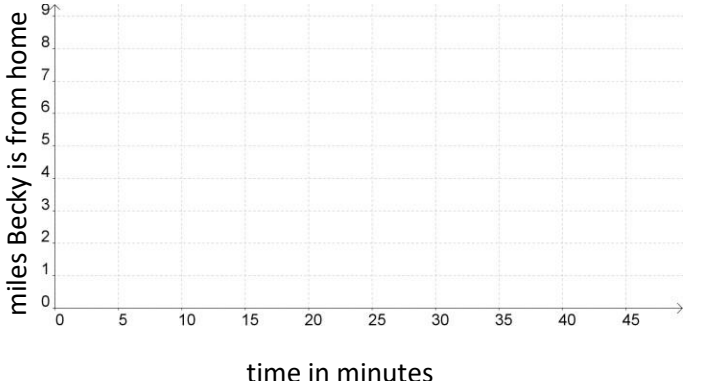
Standard: S.ID.7: Interpret slope (rate of change) and the intercept (constant term) of a linear model in the context of the data.

Objective: Students will identify the slope and intercept and sketch graphs using this information.

Preparation: Copy enough activity sheets for each student.

Procedures:

1. Distribute one sheet to each student.
2. Have students read the first row of the activity sheet. Ask students how the real-world application relates to the sketched graph and equation.
3. Have students complete the second row of the activity sheet. Ask students to read the real-world application and write the equation, slope, and y -intercept using that information. Have students sketch a graph of the equation.
4. Once completed, have students work on the third row of the activity sheet. Ask students to write a real-world application of a linear equation. Have students write the equation that relates and identify the slope and y -intercept. Have students make a sketch of the graph of the equation.

Function (slope & y-intercept)	Sketch of Graph	Real World Application
$y = 0.5x + 5$ slope: 0.5 y-intercept: 5		A cab driver charges \$0.50 for every mile and has a \$5 boarding charge.
$y =$ slope: y-intercept:		Becky is taking a walk. She walks at a pace of 15 minutes a mile. She started her walk at school which is 3 miles from her house.
$y =$ slope: y-intercept:	