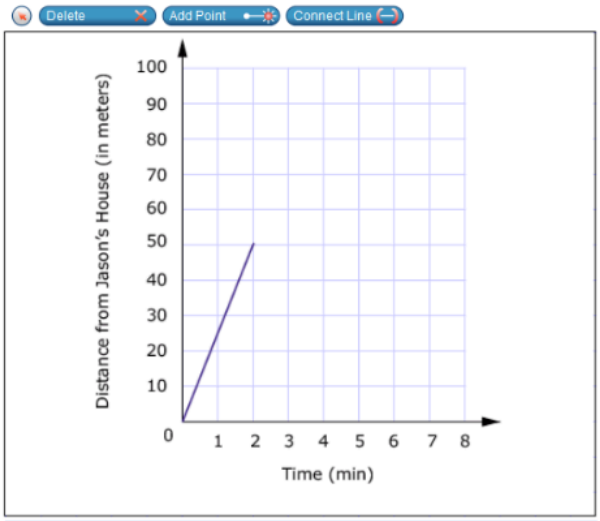
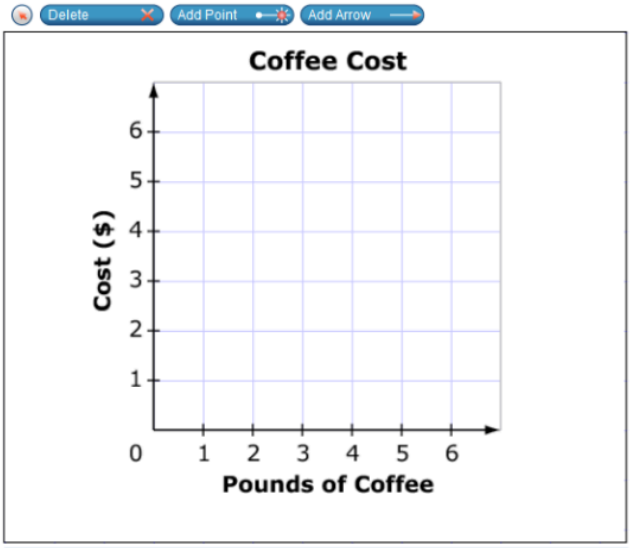
SBAC Math 8 ANSWERS Practice B

Name _____ Period _____ Date _____

Functions: Modeling B

1	**761** The school is 100 meters from Jason's house. The following describes his most recent trip: • He walked 50 meters toward school in 2 minutes. He realized that he left a book at home. • He turned around and walked home at the same speed. • He spent 1 minute looking for his book. • He walked all the way to school at twice his original speed. Use the Line tool to finish a graph that accurately represents Jason's trip. 	Graph
2	**766** Coffee costs $2.00 per pound at a coffee shop. Use the Add Arrow tool to draw a line that shows the proportional relationship between the number of pounds of coffee purchased and the total cost. 	Graph

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3

1847

The table shows the relationship between the average number of hours students study for a mathematics test and their average grade.

Hours Studying	Average Grade
0	62
1	78
2	85
5	74

Which type of function is most likely to model these data?

(A) linear function with positive slope

(B) linear function with negative slope

(C) non-linear function that decreases then increases

(D) non-linear function that increases then decreases

D

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2075

Kyle was given the following problem to solve.

> A company sells baseball gloves and bats. The gloves regularly cost $30 and the bats regularly cost $90. The gloves are on sale for $4 off, and the bats are on sale for 10% off. The goal is to sell $1200 worth of bats and gloves each week. Last week, the store sold 14 gloves and 9 bats.
>
> Did the store meet its goal?

The steps Kyle used to solve the problem are shown. Select the first step that shows an error.

☐ **Step 1:**

$$\begin{array}{r} \$30 \\ -\ \$4 \\ \hline \$26 \end{array}$$

☐ **Step 2:**

$$\begin{array}{r} \$26 \\ \times\ 14 \\ \hline \$364 \end{array}$$

☐ **Step 3:**

$$\begin{array}{r} \$90 \\ \div\ 0.9 \\ \hline \$100 \end{array}$$

☐ **Step 4:**

$$\begin{array}{r} \$100 \\ \times\ 9 \\ \hline \$900 \end{array}$$

☐ **Step 5:** Yes, the store met its goal.

$$\begin{array}{r} \$900 \\ +\ \$364 \\ \hline \$1264 \end{array}$$

Step 3