

n= 15X

Period

Date

Using A Line of Best Fit to Make Estimates

<u>Mini Golf:</u>

Jamal and Alisha played a round of miniature golf. They made some notes of the time it took them to play. Their data are plotted in the graph below:



Sand Sharks:

Lengths and corresponding ideal weights of sand sharks were collected and the data is plotted below.



What is the slope of your line? What does this number tell us about the length and ideal weight for a sand shark?



The following questions can be answered using your equation.

1. Predict the weight of a sand shark whose length is 75 inches.

y=4.5x-165 y=4.5(75)-165 y=172.5

A 75 inch shark will weigh ~ 172.5 lbs.

2. If a shark weighs 150 pounds, how long would we expect it to be?

 $\frac{150}{165} = 4.5 \times -165$ $\frac{219}{4.5} = \frac{4.5 \times 4.5}{4.5}$ $\frac{165}{70} = \times$ y=4.5x-165 +165 315=45×



Exam Grade:

Graphed below are number of hours studied and the final exam grade earned.



What is the slope of your line? What does this number tell us about time spent studying and a final exam score?



For every additional hour increase by 67

The following questions can be answered using your equation.

1. Predict the exam grade of a student who studied for 6 hours.

y= 6x+64 y=36+64 y=6(6)+64 y=100

If the student studicator 6 hours they could get 100%

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2. How many hours should a student study if they want to get an 80 on the test?

y=6x+64 0=6x+64

Height and Shoe Size:

The graph below shows the height and shoe sizes of six randomly selected men.

