**Lesson 4.5 HW - Functions Fitted to Data**



**#1-3 Use the table of data below.**

Derrick started a new website. He tracks the

number of new visitors to the site each day. The

number of new visitors each day is listed in the table

below.



1. Create a scatter plot showing the relationship between the

 day and the number of new visitors.

2. Show that the function $y=3^{x}$ is a good estimate for the relationship between the day and the number of new visitors by graphing $y=3^{x}$.

a. Make a table of points

b. Compare the graph of the function to the scatter

 plot of the data. Why is it a good estimate of the data?

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3. Using the graph, on which day will Derrick’s site have approximately 200 visitors? \_\_\_\_\_\_\_

**#4-5 Use the graph and the info below to answer the following questions.**



The weights of oranges vary. Maria wants to

come up with a way to estimate the number of

oranges given a weight. She weighs oranges and

makes the graph to the right. She finds that

the function $y=0.6x-0.5$ is a good fit for

the data.

4. If there are nine oranges in a bag, approximate the weight. \_\_\_\_\_\_

5. Interpret the equation in the context of the problem.

a. Determine the units of slope and the y-intercept. Slope: \_\_\_\_\_\_\_\_ Y-intercept: \_\_\_\_\_\_\_\_\_

b. Describe what the slope and y-intercept mean in the context of the problem.

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