

Name _____

Traffic Volume Activity Sheet

Go to <http://www.gomdot.com>, and look for the traffic volume data link. Click on Maps, and then click on Traffic Volume Maps. Click on the oldest year first, and then choose a city to use in your activity, and print that map. Then go back and click on the most recent year of the same city, and print that map.

Now that you have your two maps, compare them. Take the most recent map and circle the increase in traffic along a certain segments of road in one color and the decrease in another color. Choose a section of the road that had an increase. This segment will be referred to as the study section.

City in which the study section is being conducted _____

Older year 200____ Amount of traffic on study section _____

Recent year 200____ Amount of traffic on study section _____

Find the percent of increase.

Find the difference in the older traffic volume and newer traffic volume. Divide the difference by the old traffic volume. (Show work below.)

Round your answer to the nearest hundredth. _____ Next, change it to a percent.

_____ You have just found the percent of increase between the 2 years.

Activity 8.3.1

You will now take the percent of increase and the formula for the growth model $F = P(1 + i)^n$ to predict what the volume of traffic will be for upcoming years.

$F = P(1 + i)^n$

- F = forecast number
- P = present year traffic number
- i = percent of increase
- n = the number of years in the future

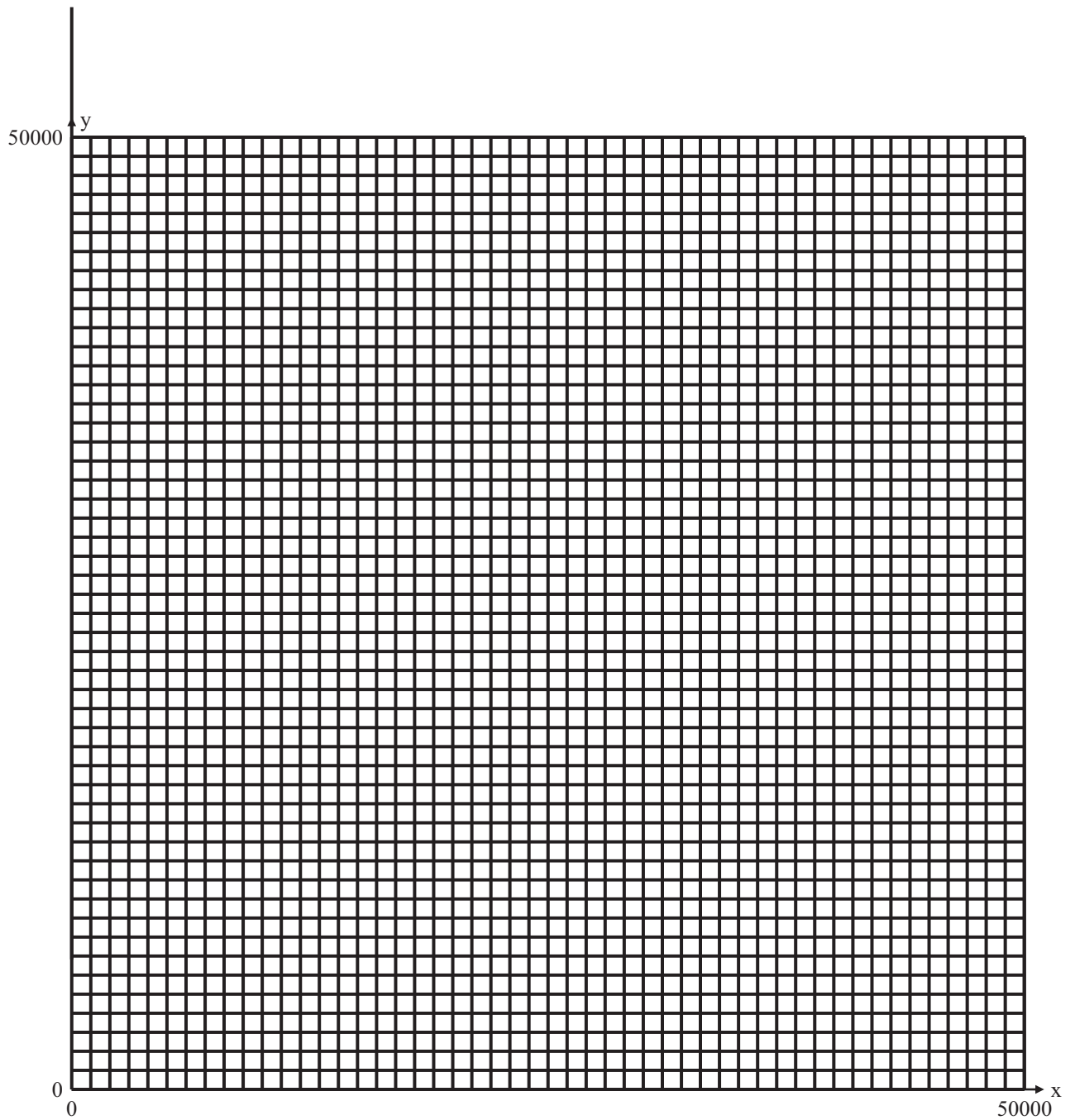
Complete the following table.

Future Years From Present	Volume of Traffic on Study Section
1	
2	
3	
4	
5	
10	
15	
20	
25	

How many more vehicles are projected to be on the road in 25 years than are on the road at the present? _____ (Show your work below.)

According to MDOT, traffic doubles about every 20 years. From the information above, is this correct? _____ Explain your answer. _____

Graph the information above on the Cartesian coordinate grid.



What type graph does it make? _____

Is the graph a function? _____ Why or why not? _____
