Name: _____ Date: _____

Graphing Quiz

1. The _____ variable is what is being measured in a graph.
2. The _____ variable is what is being changed (manipulated) in your graph.
3. Typically, the x-axis includes the _____ variable, and the y-axis includes the _____ variable.
4. If one variable increases, and the other decreases, this is known as a/n _____ relationship.
5. If both variables increase or decrease together, this is known as a/n _____ relationship.

For each scenario below, determine which variable would belong on the x-axis, and which variable belongs on the y-axis of a graph:

6. The speed of a racecar is measured over the distance of one mile.
   a. X-axis: _____
   b. Y-axis: _____
7. The growth of a bacteria colony is measured over a week.
   a. X-axis: _____
   b. Y-axis: _____
8. The number of babies born is counted over a one-year time period.
   a. X-axis: _____
   b. Y-axis: _____

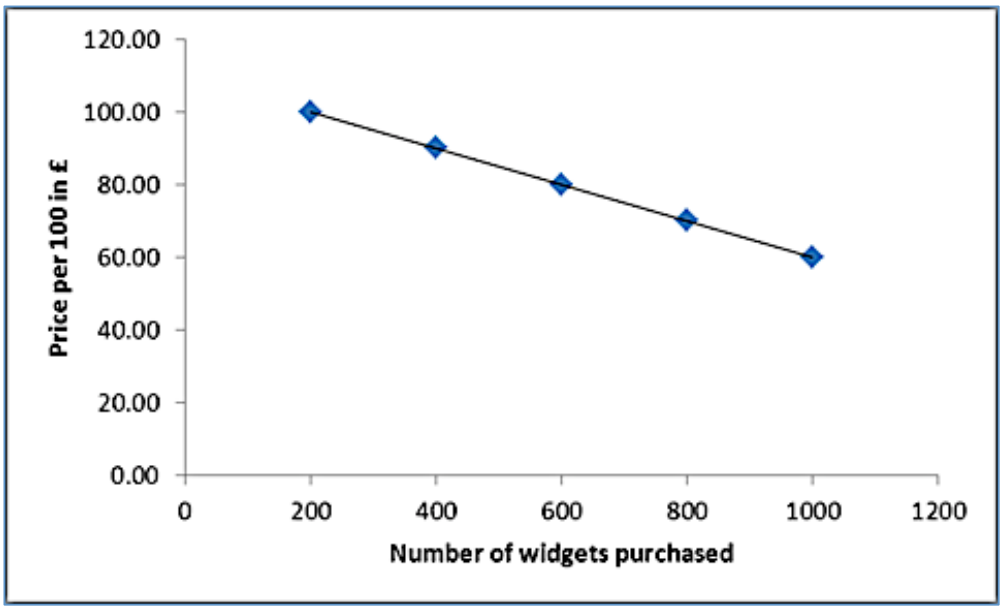
For each scenario below, determine if the relationship is inverse or direct.

9. The temperature of a light bulb increases over time. _____
10. If more sunscreen is applied, the less UV light is absorbed. _____
11. As the temperature increases, the body produces more sweat. _____
12. The faster I run, the less distance I will have to the finish line. _____

For each description below, determine whether or not a pie chart, line graph, or scatter plot would be the best graph to depict the information.

13. The average temperature each month over an entire year. _____
14. The percentage of each brand of scarves sold during Macy's annual accessory sale. _____
15. Average income per years of experience graph involving many subjects. _____

16. Determine if the graph below depicts a direct relationship or an inverse relationship. Explain your answer:



_____

_____

_____

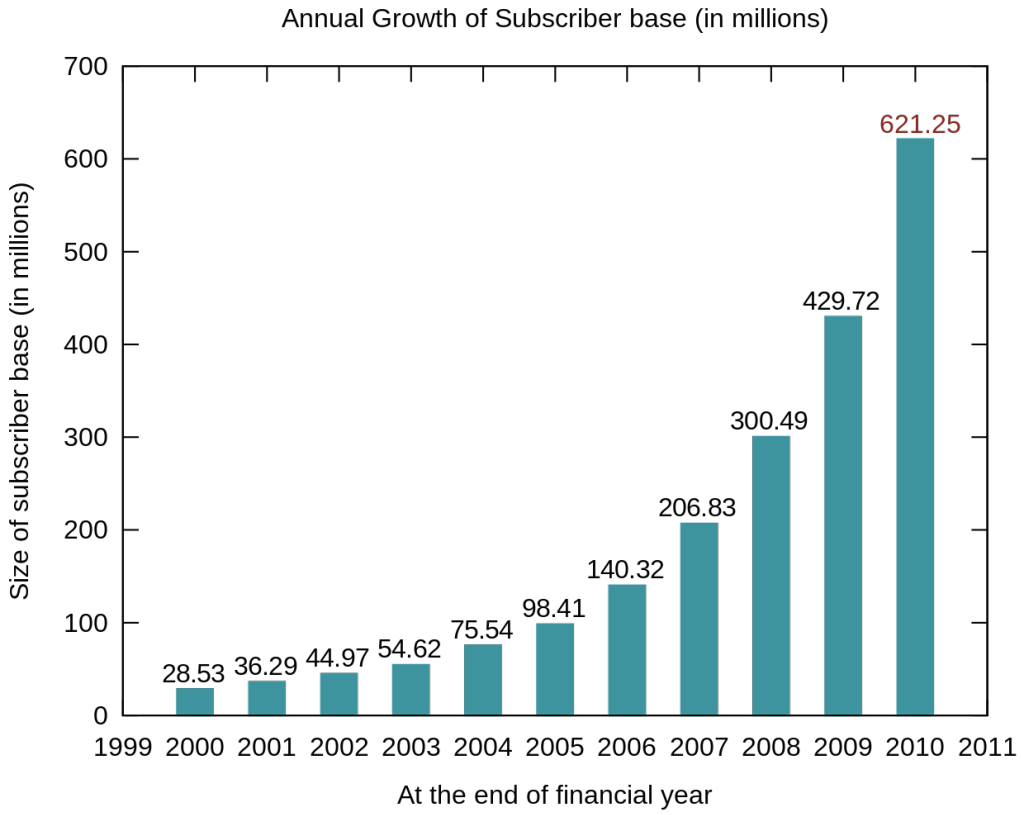
_____

_____

_____

_____.

The graph below depicts the amount of cell phone subscriptions over a 12-year period in India.



17. The type of graph displayed above is a _____ graph.

18. In which year was there the least amount of cell phone subscriptions? _____

19. Describe the trend seen the graph above:

_____

_____

_____.

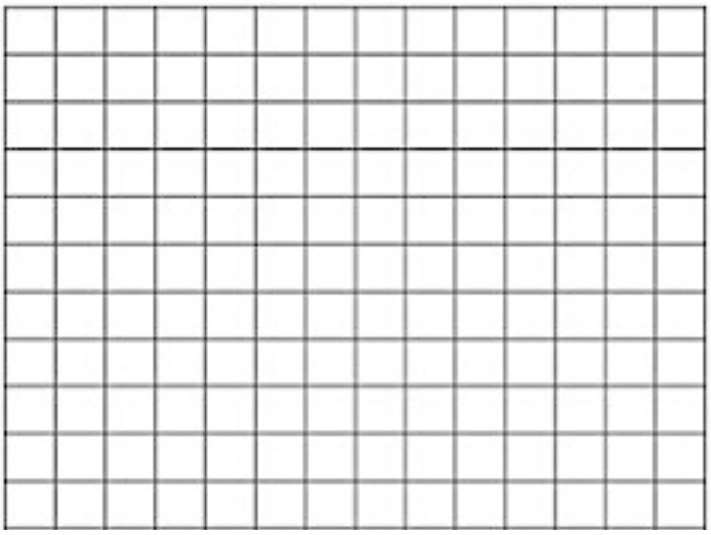
20. Can you predict what the amount of cell phone subscriptions will be in 2011? Explain.

_____

_____

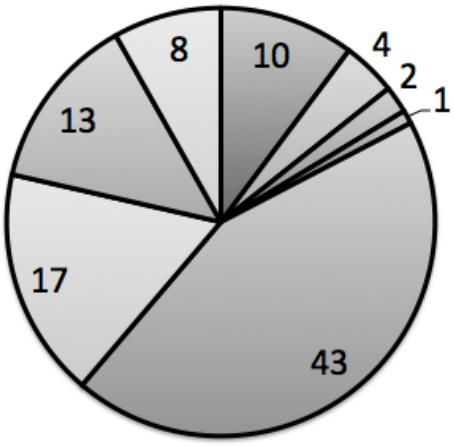
_____.

21. Create a line graph in the space provided using the chart below, which measures the speed of a cheetah. Be sure to give your graph a clear title, label your x-axis and y-axis, and clearly mark your graph.



Distance (m)	Time (s)
5	0.5
15	1
25	1.5
35	2

Examine the chart at right, which depicts the data of the percentages of different types of vehicles found during rush hour traffic.



22. The chart is a _____ _____, which is typically used to compare _____.
23. Cars were found to be the highest percentage of vehicles during rush hour. What was the percentage of cars?

    _____
24. Taxis were found to be the second most used vehicle, and buses third. Label their sector accordingly.
25. If the traffic department were interested to see how the percentages of vehicles changed over the 24 hours within a day, would this type of chart be useful? Why or why not?

    _____.