

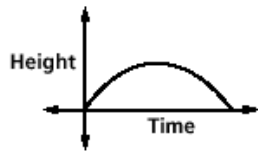
Name \_\_\_\_\_

Date \_\_\_\_\_ Pd. \_\_\_\_\_

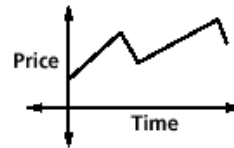
### Notes: Graphs and Functions

<b>Interval</b>	On a graph, the _____ from one grid line to another.
<b>Scale</b>	A system of marks at _____ used in measurement or graphing.
<b>Independent Variable</b>	The variable in a function whose value is _____.
<b>Dependent Variable</b>	The variable in a relation whose value _____ on the value of the independent variable.

**Example 1** The graph below represents the height of a football after it is kicked downfield. Identify the independent and the dependent variable. Then describe what is happening in the graph.



**Example 2** The graph below represents the price of stock over time. Identify the independent and dependent variable. Then describe what is happening in the graph.



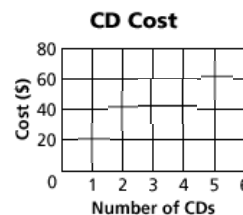
**Example** A music store advertises that if you buy 3 CDs at the regular price of \$16, then you will receive one CD of the same or lesser value free.

a. Make a table showing the cost of buying 1 to 5 CDs.

Number of CDs	1	2	3	4	5
Total Cost (\$)					

b. Write the data as a set of ordered pairs.

c. Draw a graph that shows the relationship between the number of CDs and the total cost.



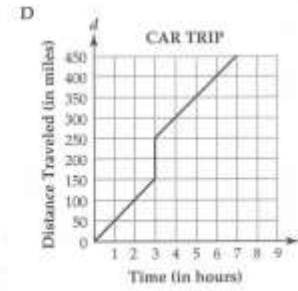
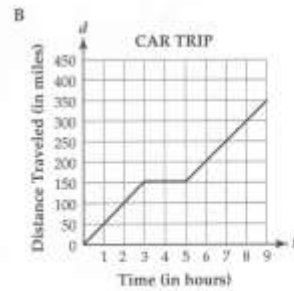
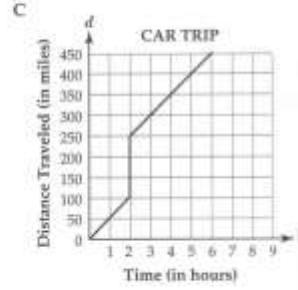
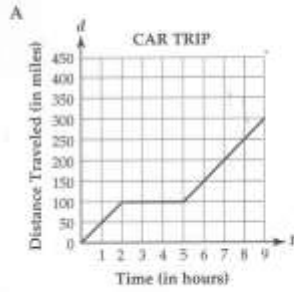
Name \_\_\_\_\_

Date \_\_\_\_\_ Pd. \_\_\_\_\_

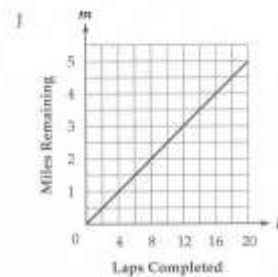
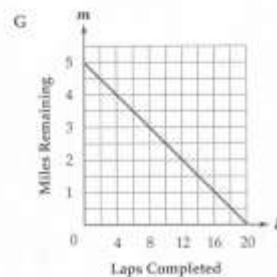
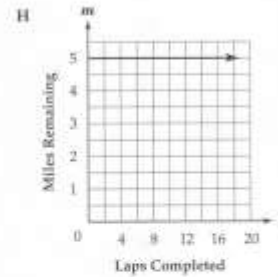
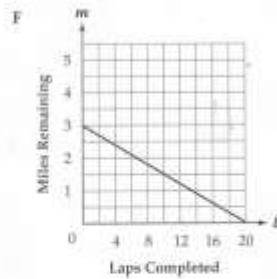
### Exit Card: Graphs and Functions

A family travels at a constant speed during a road trip. After 3 hours, they stop for 2 hours to eat and rest. They then continue for 4 more hours at the same speed.

Which of these graphs best represents this situation?



Journey wants to run a total of 5 miles around a  $\frac{1}{4}$ -mile track. Which of these graphs represents the relationship between laps completed ( $l$ ) and miles remaining ( $m$ )?

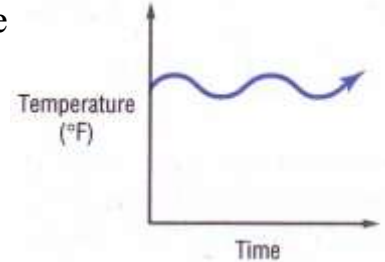


Name \_\_\_\_\_

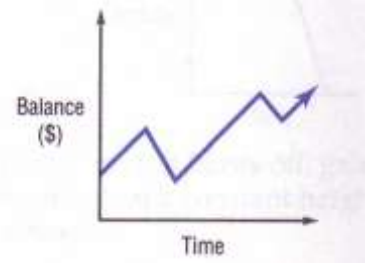
Date \_\_\_\_\_ Pd. \_\_\_\_\_

**Homework: Pages 46 – 47 (10 – 18, 21)**

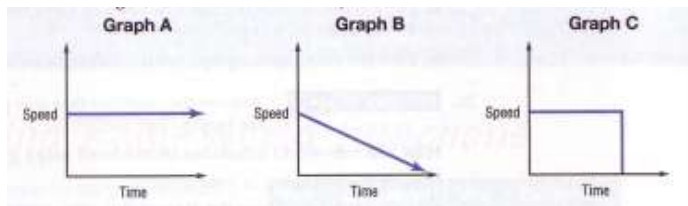
10. The graph represents Michelle’s temperature when she was sick. Describe what is happening in the graph.



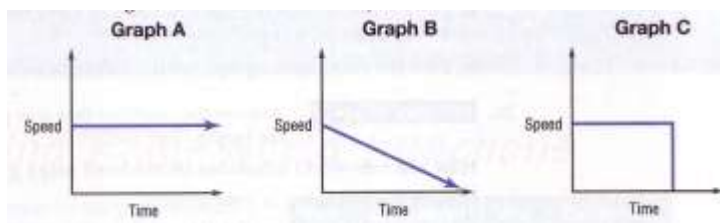
11. The graph represents the balance in Rashaad’s checking account. Describe what is happening in the graph.



12. Identify the graph that displays the speed of a radio-controlled car as it moves along and then hits a wall.



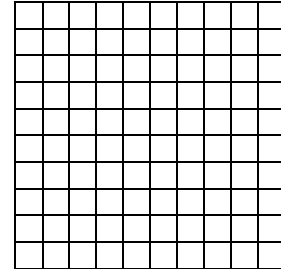
13. In general, as a person gets older, their income increases until they retire. Which of the graphs represents this?



The table shows the charges for parking a car in the hourly garage at an airport.

Time Parked (h)	0–2	2–4	4–6	6–12	12–24
Cost (\$)	1	2	4	5	30
After 24 hours: \$15 per each 24-hour period					

14. Write the ordered pairs with whole number coordinates that represent the cost of parking for up to 36 hours.



15. Draw a graph to show the cost of parking for up to 36 hours.

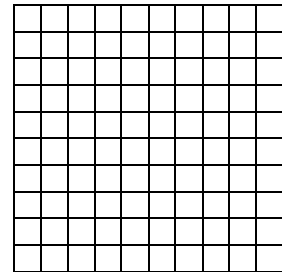
16. What is the cost of parking if you arrive on Monday at 7:00 a.m. and depart on Tuesday at 9:00 p.m.?

The table shows the relationships between the sum of the measures of the interior angles of convex polygons and the number of sides of the polygons.

Polygon	triangle	quadrilateral	pentagon	hexagon	heptagon
Sides	3	4	5	6	7
Interior Angle Sum	180	360	540	720	900

17. Identify the independent and dependent variables.

18. Draw a graph of the data.



21. When ice is exposed to temperatures above 32° F, it begins to melt. Draw a reasonable graph showing the relationship between the temperature of a block of ice as it is removed from a freezer and placed on a counter at room temperature (*Hint*: the temperature of the water will not exceed the temperature of the room).

