ANALYZING GRAPHS OF FUNCTIONS

1. Foster's Flood Repair charges \$53 for a damage estimate and \$13.50 per hour to clean up after flood damage. Which equation represents the relationship between the number of hours, h, and the total cost, c?

A.
$$c = 53 + 13.50$$

Independent: _____

B.
$$c = 53 + 13.50h$$

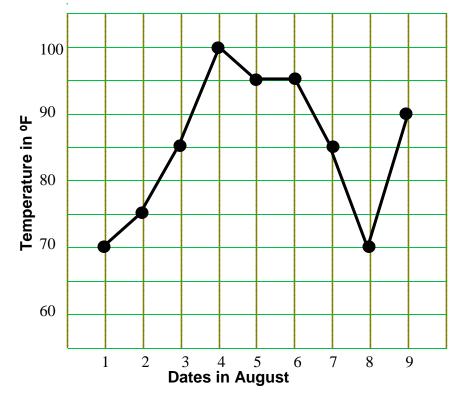
Dependent: _____

$$C. c = 53h + 13.50$$

D.
$$c = 53h + 13.50h$$

- 2. The Junior class is selling \$20 prom tickets. The money raised will be given to the DJ for his services. Which best describes the dependent quantity in this situation?
 - A. The number of tickets sold is dependent on the amount the DJ will earn.
 - B. The price of each ticket is dependent on the number of tickets sold.
 - C. The amount the DJ earns is dependent on the number of tickets sold.
 - D. The amount the DJ earns is dependent on the price of each ticket.

The graph shows the daily high temperatures over the first 9 days of August.



Write the ordered pair in words:

What is the independent variable?

What is the dependent variable?_____

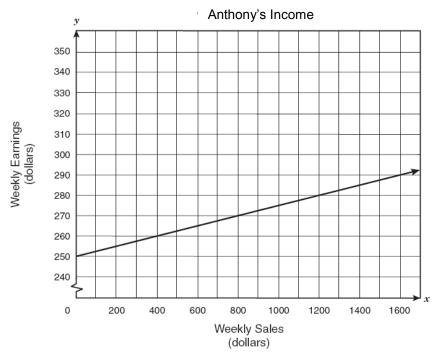
Does this represent a function? Yes or No

What is the temperature on August 8th?

When is the temperature 85 $^{\circ}$?

Between which 2 dates does the temperature increase by the greatest number of degrees?

As a part-time employee at Electronic Bionic, Anthony earns a weekly salary plus a 2.5% commission on his total weekly sales. The graph below shows what Anthony's weekly earnings could be, depending on his weekly sales.



- 8. The ______ DEPENDS ON ______.
- 9. Find the value of E(800)= _____
- 10. Find the value of "s" when E(s) = 280: s = _____
- 11. Does this relation represent a function based on our definition? Yes or No

When diving in the ocean the relationship between the pressure of the water on the diver, P, and the depth of the diver, d, is described by the function P = 1.47d + 14.7

12. Complete the table using your calculator:

Depth (in meters)	2	4	6	8
Pressure				

- 13. Write the ordered pairs from the table:
- 14. The ______ DEPENDS ON ______.
- 15. Find the depth of the diver when the pressure is 36.75._____
- 16. Find the value of P(12)=
- 17. What does the ordered pair (100, 161.7) mean for this function?