Name _____ Algebra 1

Chapter 4 & 5 Practice Test

Solve. Show your work.

1. $2x - 7 < -13$

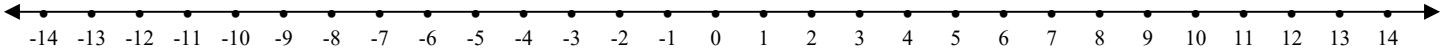
2. $8 - x \geq 15$

3. $4x - 5 > 17 + 2x$

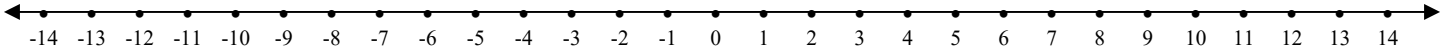
4. $8 < 2x + 10 < 16$

Graph the solution on the number lines.

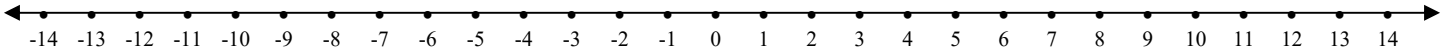
5. $x \neq 6$



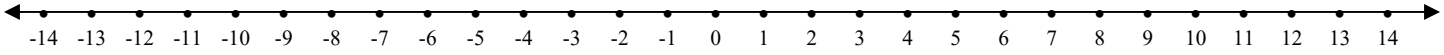
6. $x \leq 3$



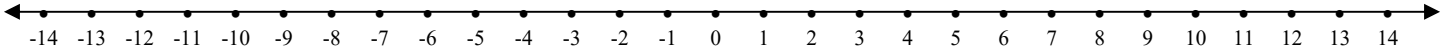
7. $x > -3$ AND $x < 4$



8. $x < 2$ AND $x > 5$



9. $x < 1$ OR $x > 3$



Determine if each set of data is a relation. If it is a relation, determine if it is a function.

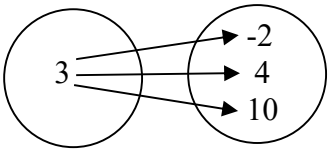
10.

x	y
7	2
1	9
5	2
9	1

Relation? Yes No

Function? Yes No

11.



Relation? Yes No

Function? Yes No

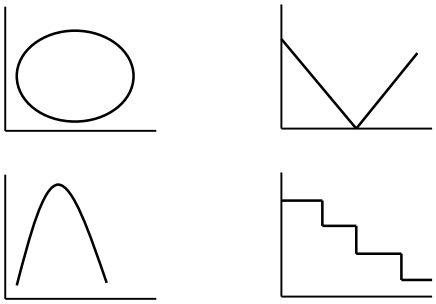
12. State the domain and range of the following relation:

B = {(-3, 5), (1, 8), (4, 7), (9, 2), (15, -2)}

Domain =

Range =

13. Circle the graphs that represent functions:



14. Make a table of five ordered pairs for the function: $y = 2x - 7$
Graph the function for the Domain = All real numbers.

x	y

Determine if the function varies directly, inversely, or neither. If it varies directly or inversely, write the equation for the function.

15.

x	y
2	16
3	24
4	32
5	40

Circle one: Direct Inverse Neither

Function equation:

16.

x	y
2	20
4	10
5	8
16	2.5

Circle one: Direct Inverse Neither

Function equation:

17. If y varies directly with x, and y = 4 when x = 6:
    a. Solve for k and write the function.
    b. Use the function to find the value of y when x = 15.

18. If y varies inversely with x, and y = 4 when x = 6:
    a. Solve for k and write the function.
    b. Use the function to find the value of y when x = 8.