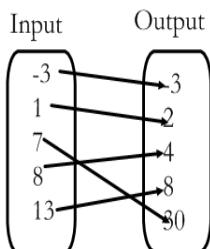


OLSEN – ACTIVITY 5 REVIEW

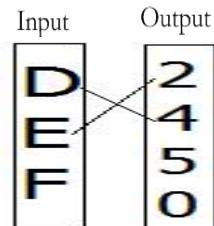
Name _____ Period _____

Determine whether each relation is a function. Then state the domain and range of each relation.

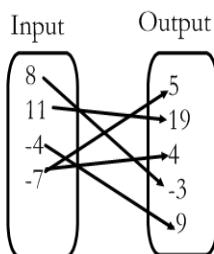
1. Function? Y N



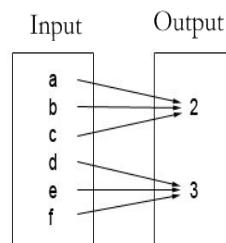
2. Function? Y N



3. Function? Y N



4. Function? Y N



5. Function? Y N

x	y
-7	9
-3	11
-1	-8
6	8
-3	19
-9	-10

6. Function? Y N

x	y
-6	13
-4	18
-2	25
0	34
2	45
4	58

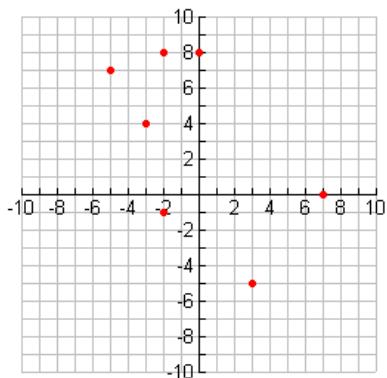
7. Function? Y N

x	y
3	18
8	11
11	4
7	-6
2	18
-1	21

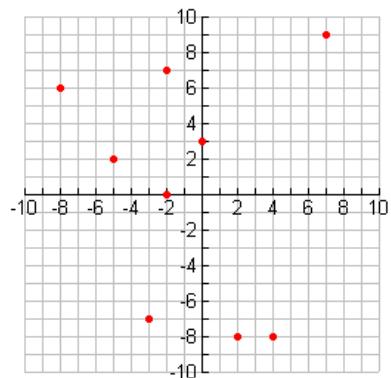
8. Function? Y N

x	4	2	0	2	-4
y	1	1	1	0	0

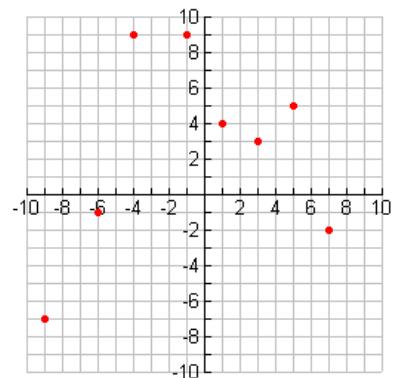
9. Function? Y N



10. Function? Y N



11. Function? Y N



12. Function? Y N

$$\{(5,4), (6,3), (7,2)\}$$

13. Function? Y N

$$\{(4,5), (4,3), (5,2)\}$$

14. Function? Y N

$$\{(5,4), (6,4), (7,4)\}$$

15. Convert the mapping diagram in problem 1 into a table, graph, set of ordered pairs, and function notation.

16. Convert the table in problem 8 into a mapping diagram, graph, set of ordered pairs, and function notation.

17. Convert the graph in problem 9 into a mapping diagram, table, set of ordered pairs, and function notation.

18. Convert the set of ordered pairs in problem 13 into a mapping diagram, table, graph, and function notation.

For problems 19 – 25, use the following 3 functions below. Your final answers MUST be written in function notation.

$$f(x) = \frac{4x - 6}{3}$$

$$g(x) = -2x^2 + 5x - 7$$

$$h(x) = |x - 1| + 6$$

19. Find $g(2)$

20. Find $f(-3)$

21. Find $h(-9)$

22. Find $g(-1)$

23. What value of x results in $f(x) = 2$?

24. What value of x results in $h(x) = 9$?

25. What value of x results in $g(x) = -7$?

For problems 26 – 30, consider the sequence: 1, 3, 6, 10, 15, 21, ...

26. What is $f(4)$?

27. What is $f(2)$?

28. What value of x results in $f(x) = 21$?

CHALLENGE:

29. What is $f(8)$?

30. What value of x results in $f(x) = 55$?