Functions Quiz Review

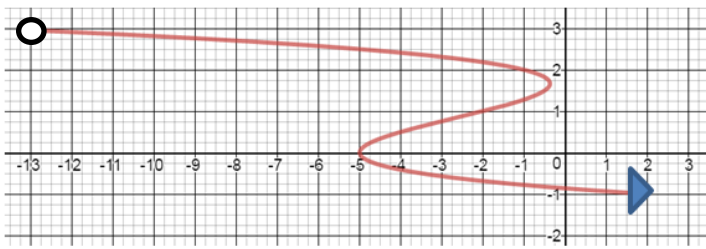Name_____ Period:_____

For questions 1-8: determine if the relation is a function and then determine the domain and range.
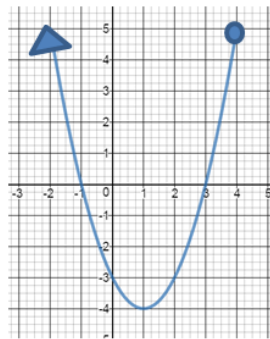
1.

Function?   Yes   No
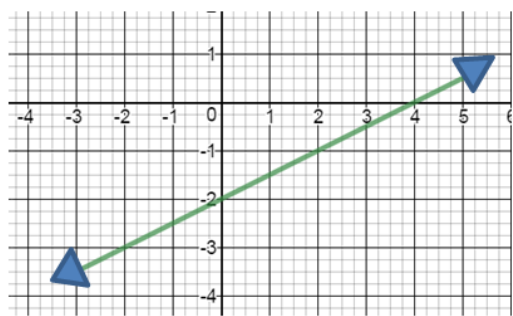
Domain: _____

Range: _____

2.

Function?   Yes   No
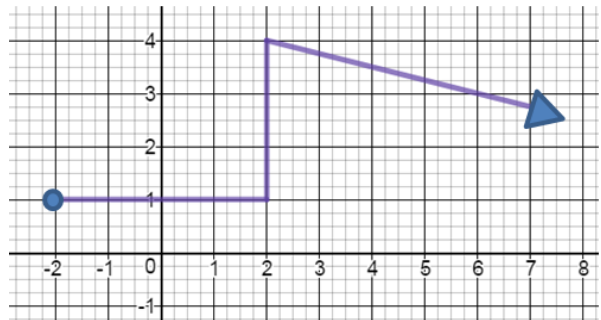
Domain: _____

Range: _____

3.

Function?   Yes   No

Domain: _____

Range: _____

4.
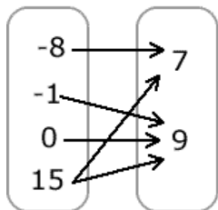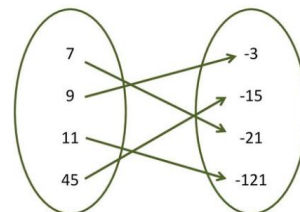

Function?   Yes   No

Domain: _____

Range: _____

5.

Function?   Yes   No

Domain: _____

Range: _____

6.

Function?   Yes   No

Domain: _____

Range: _____

7.

Hours studying	Test points
3	27
6	54
9	87
1	8
7	66
10	100
4	33
2	23

Function?   Yes   No

Domain: _____

Range: _____

8.

Input	Output
3	0
4	7
5	10
4	14
10	25

Function?   Yes   No

Domain: _____

Range: _____

Given: $a(x) = \frac{1}{2}x - 3$ and $b(x) = 2x^2 - 11$ and $c(x) = -4x + 7$

9. What is $a(6)$?

10. If $a(x) = 9$, what is x?

11. What is $b(-3)$?

12. If $b(x) = 61$, what is x?

13. What is $c(-41)$?
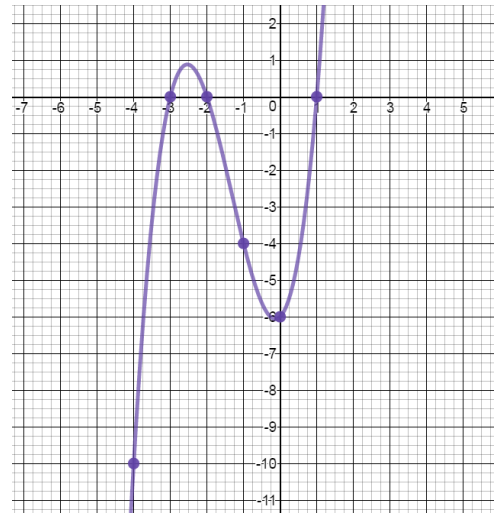
14. If $c(x) = -93$, what is x?

For 15-18, use the graph of $f(x)$ to the right.

15. What is $f(-1)$? _____

16. What is $f(-4)$? _____

17. $f(x) = 0$. What is/are the x values? _____

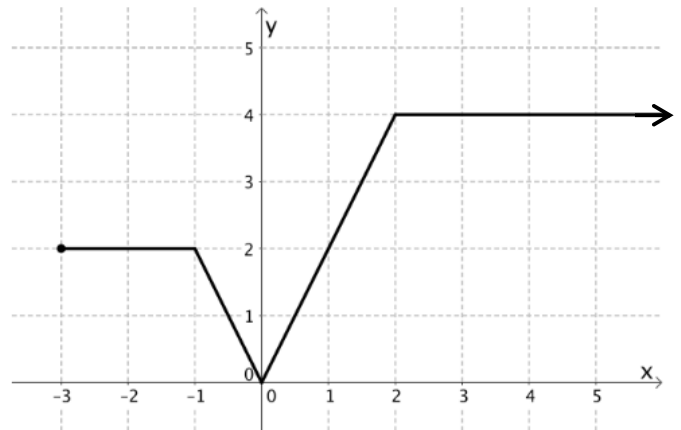18. $f(x) = -10$. What is/are the x values? _____

For 19-22, use the graph of $f(x)$ to the right.

19. What is $f(2)$? _____

20. What is $f(-3)$? _____

21. $f(x) = 0$. What is/are the x values? _____

22. $f(x) = 2$ What is/are the x values? _____

Tim is working hard at earning as much extra credit as he can for the final. The equation that represents this situation is $P(d) = 3d + 8$, where d is the number of days he turns in extra credit, and $P(d)$ represents the number of extra credit points.

23. What does $P(5)$ represent in context of the problem?

24. What is $P(5)$?

25. What does $P(d) = 50$ represent in context of the problem?

26. If $P(d) = 50$, what is d?

27. What does $P(d) = 0$ represent in context of the problem?

28. Did Tim have any extra credit points before starting these assignments? If so, how many?