Algebra 1   Name_____

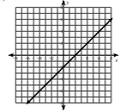## Functions, Domain, and Range Review

Date_____ Block_____

1) When is a relation a function? What are some ways to tell if a relation is a function?

2) What is the domain of a function? What is the range of a function? Given a member of the domain, how do you find its value in the range?
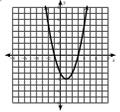
If $f(x) = -4x - 7$, find...

3) a) $f(3)$ b) $f(-7)$

If $f(x) = -3x^2 - 2x + 1$, find...

4) a) $f(-4)$ b) $f(0)$

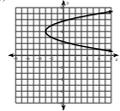For each question, decide if it is a function. Then find the domain and range in set builder notation.
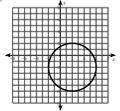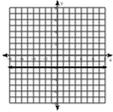
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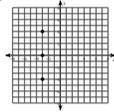

6)

7)

8)

Given the function and a domain, find the range.

9) $f(x) = -7x + 3$, D={-12, -4, 3, 20}

10) $f(x) = 2x^2 - 2x + 5$, D={-2, -1, 0, 1, 2}

11) $f(x) = 4x - 1$, D={x|x}

12) $f(x) = 2x^2 - 6x + 11$, D={x|x}

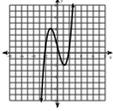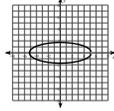For each question, decide if it is a function. Then find the domain and range in set builder notation.

13)

14)

15)

16)

If $f(x) = -3x - 2$, find...

17) a) $f(0)$ b) $f(4)$ c) $f(-1)$

If $f(x) = -11x^2 - 5x + 13$, find...

18) a) $f(1)$ b) $f(-1)$ c) $f(-4)$

Given the function and a domain, find the range.

19) $f(x) = -6x - 1$; D={-2, -1, 0, 5}

20) $f(x) = -3x^2 + x + 8$; D={-2, -1, 0, 1}

21) $f(x) = 2x^2 + 8x + 3$; D={x|x}

22) $f(x) = -4x^2 + 8x + 3$; D={x|x}