ALGEBRA II
Chapter 2 section 1
Represent Relations and Functions
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FOCUS:
How do you graph relations and functions?

VOCAB:
Relation:

Domain:

Range:

Function:

Equation in Two Variables:

Linear Function:

WARM – UP:

Evaluate each expression for the given value of x.

1. $x^2 + 5x$ x = -2_____

2. $4x - 3x^3$ x = 2_____

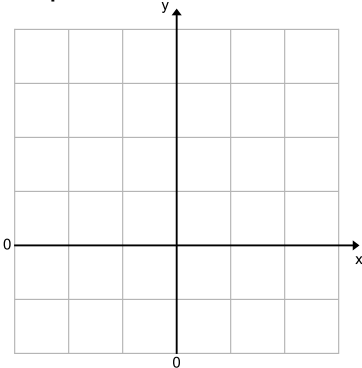3. $-x^2 + 3x - 10$ x = 3_____

4. A square flower garden has a perimeter of 24 feet. How long is each side?   _____
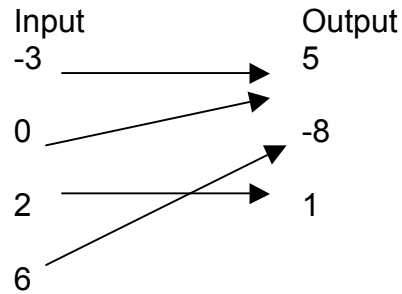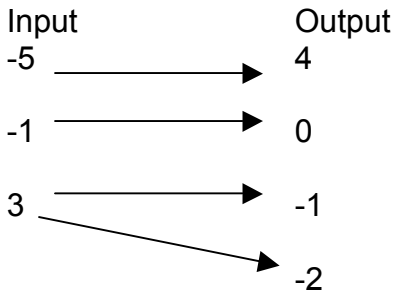
NOTES:

Consider the relation given by (3, 2), (-1, 0), (2, -1), (-2, 1), (0, 3).

Identify the domain_____   range_____

Represent the relation using a graph and a mapping diagram.

Is the relation a function? Explain.

Input   Output   Input   Output

-5 → 4   -3 → 5

-1 → 0   0 → -8

3 → -1   2 → 1

     -2   6

The first graph below plots the total cost of membership under Plan A at an athletic club at the end of every two months. This plan changes an initial fee plus a $30 monthly fee. The second graph plots the total cost of membership under Plan B at the end of two months. Plan B has a higher initial fee, but the last three months are free. Are the relations represented by the graphs functions? Explain.

Graph.
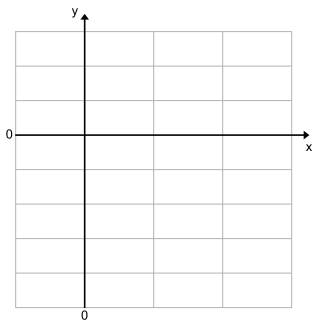
y = 3x - 5   y = 3x - 2
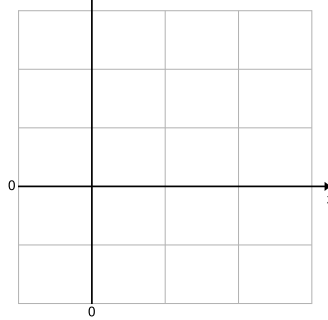
Tell whether the function is linear. Then evaluate the function when x = -3.

a. $f(x) = -2x^3 + 5$ b. $g(x) = 12 - 8x$

Let's see if you comprehended what we worked on in class…

Try _____ for homework