Student Name : **Gavin McRoy**

Login Name : **GMCROY**

Date: **09/03/2019 11:50 AM**

Class Name : **MATH 1050/1051 Fall 2019**

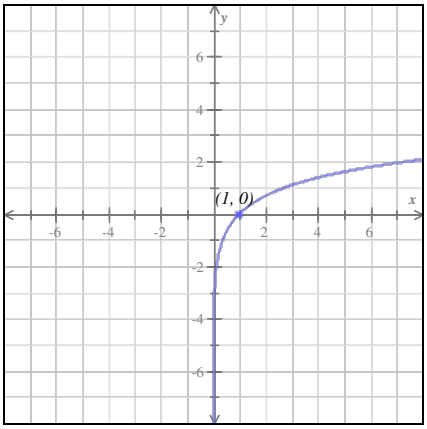
Review Questions

1. Find the first four terms of the sequence given by the following.

$$a_n = \frac{(-1)^{n+1}}{n+5}\ ,\ n = 1,\ 2,\ 3,\ \ldots$$

2. Below is the graph of $y = \ln(x)$.

Translate it to become the graph of $y = \ln(x-1)+3$.



3. Solve for y.

$$-\frac{5}{y-3} = -\frac{8}{3y-9} + 3$$

4. Simplify.

$$\frac{\frac{x-2}{5x+25}}{\frac{x+2}{2x+10}}$$

5. For each equation, choose the statement that describes its solution.
If applicable, give the solution.

$2(w+1)+4w=3(2w-1)+8$
○ No solution
○ $w=$
○ All real numbers are solutions

$3(u-2)+5=2(3u-5)$
○ No solution
○ $u=$
○ All real numbers are solutions

6. Write the following expression in simplified radical form.

$$\sqrt[3]{24x^{12}w^{10}}$$

Assume that all of the variables in the expression represent positive real numbers.

7. Suppose that the relation H is defined as follows.

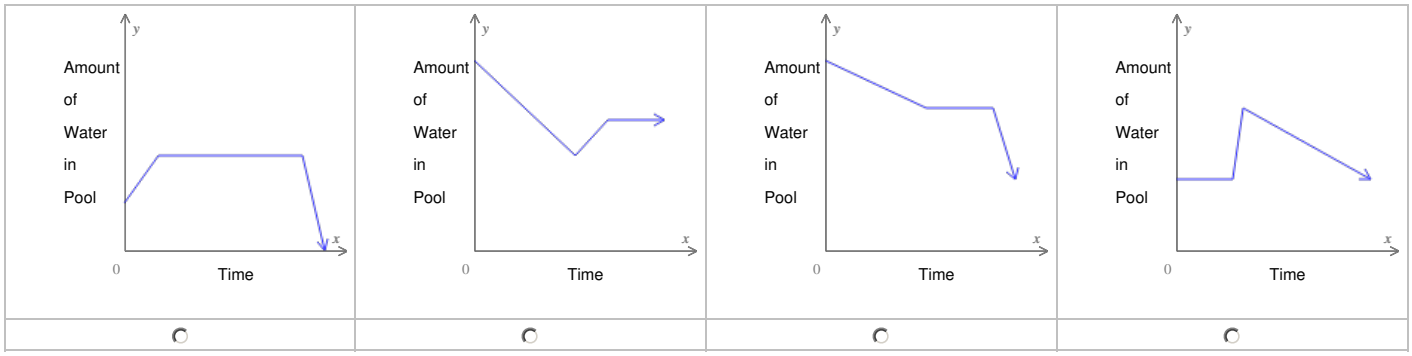
$$H=\{(4,\ -3),\ (-9,\ -9),\ (-3,\ 4),\ (0,\ 1)\}$$

Give the domain and range of H.
Write your answers using set notation.

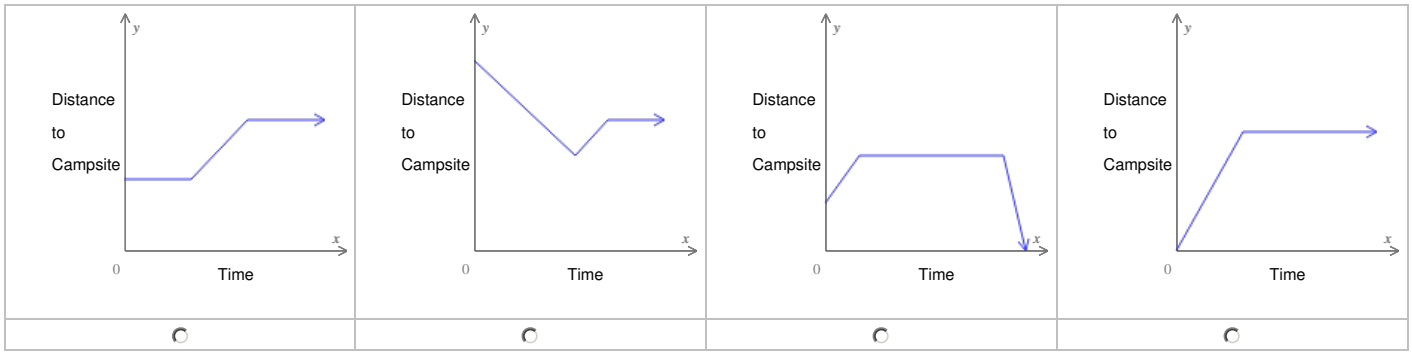
8.

For each scenario below, choose the graph that gives the best representation.

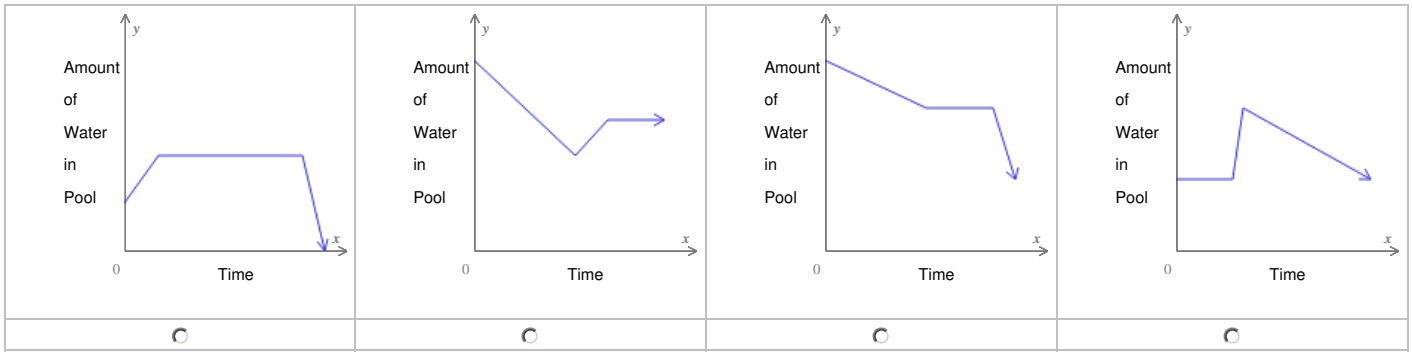
(a) Throughout last month, the Griffin family's pool was only half full of water. Three weeks ago, Mrs. Griffin filled up the pool with water. Since then, the pool has gone back to half full, due to a slow leak.



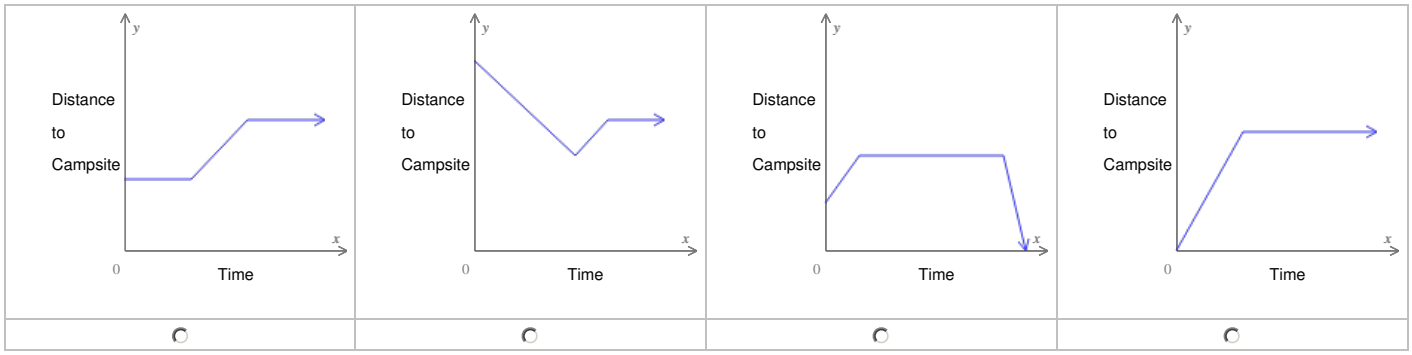
(b) Aldo is hiking toward his campsite at a constant pace. A few miles from the campsite, he sees a snake and turns and runs the other way. Minutes later, he sits to rest for awhile.



(a) Throughout last month, the Griffin family's pool was only half full of water. Three weeks ago, Mrs. Griffin filled up the pool with water. Since then, the pool has gone back to half full, due to a slow leak.



(b) Aldo is hiking toward his campsite at a constant pace. A few miles from the campsite, he sees a snake and turns and runs the other way. Minutes later, he sits to rest for awhile.



9. Simplify.

$$\frac{\frac{12n^4}{7p^3q^3}}{\frac{3mn^2}{21p^2q}}$$

10. Solve for x.

$$25^{x-5} = 125$$