LT 1E and 1F Functions – HW

Name _____ PER_____ DATE_____

Feel free to visit me after school on Mondays and Tuesday if you need more help!

1-38. Determine the corresponding outputs for the given inputs of the following functions. If there is no solution, explain why not. Be careful: In some cases, there may be no solution or more than one possible solution. Homework Help

a. $x = 8$ → $f(x) = |x|$ → $f(8) = ?$ 8

$f(8) = 8$

b. $x = 2$ → $f(x) = 3^x + 1$ → $f(2) = ?$

$f(2) = 3^{(2)} + 1 = 10$

$f(2) = 10$

c. $k = -6$ → $f(k) = \frac{k}{2} + 1$ → $f(-6) = ?$

$f(-6) = \frac{-6}{2} + 1 = -3 + 1 = -2$

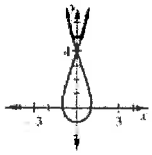
$f(-6) = -2$

d. $x = 3$ → $f(x) = \sqrt{x-5}$ → $f(3) = ?$

Not possible since $\sqrt{3-5} = \sqrt{-2}$ and $\sqrt{-2}$ cannot be simplified

1-47. Which of the relationships below are functions? If a relationship is not a function, give a reason to support your conclusion. Homework Help

a.



Not a function

b.

input (x)	output (y)
−3	19
5	19
19	0
0	−3

This is a function.

c.

input (x)	7	−2	0	7	4
output (y)	10	0	10	3	0

Not a function since the input of 7 yields two outputs.

d.

This is a function.