

Worksheet: Review Function Basics

For each problem:

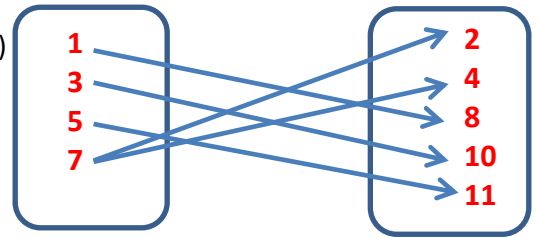
Say whether or not the relationship is a function or not, and explain why.

1)

Input	Output
-3	19
1	-5
6	-35
1	-5
9	-53

2) $(-4, 8); (6, 8); (0, 8); (-2.5, 8)$

3)

4) Input = Meigs 8th grader; Output = Their student ID number

5) Input = Letter grade; Output = Meigs student who got that grade in math on their report card

Use the given functions to find each value. Do NOT use a calculator!

$a(x) = -5x - 8$

$b(x) = 5(x + 2)$

$c(x) = \frac{x}{5} - 2$

$d(x) = 3x^2 - 36$

$e(x) = \frac{-x + 4}{2}$

6) $b(10)$ 7) $d(4)$ 8) $a(-10)$ 9) $c(45)$ 10) $e(74)$

FOR 11-13:

Write a rule in function notation to model the situation. Describe what the input and output represent.

11) At a vacation resort, you can rent a personal watercraft for \$20 per hour, plus an insurance charge of \$35.

12) Pedro is making chocolate chip cookies. He has a bag of chocolate chips that contains 250 chocolate chips. He is very particular about his cookies, so he makes sure that there are exactly 7 chocolate chips in each cookie. (For this one, your rule should calculate the **number of chocolate chips left in the bag**).

13) Same situation as #11, but this time, make your rule calculate the **total number of chocolate chips used**.