Lesson 1 Practice Problems

1. Given the rule:



Complete the table for the function rule for the following input values:

input	0	2	4	6	8	10
output						

2. Here is an input-output rule:



Complete the table for the input-output rule:

input	-3	-2	-1	0	1	2	3
output							

- 3. Andre's school orders some new supplies for the chemistry lab. The online store shows a pack of 10 test tubes costs \$4 less than a set of nested beakers. In order to fully equip the lab, the school orders 12 sets of beakers and 8 packs of test tubes.
 - a. Write an equation that shows the cost of a pack of test tubes, *t*, in terms of the cost of a set of beakers, *b*.
 - b. The school office receives a bill for the supplies in the amount of \$348. Write an equation with *t* and *b* that describes this situation.
 - c. Since *t* is in terms of *b* from the first equation, this expression can be substituted into the second equation where *t* appears. Write an equation that shows this substitution.
 - d. Solve the equation for *b*.
 - e. How much did the school pay for a set of beakers? For a pack of test tubes?

(From Unit 5, Lesson 16.)

4. Solve:
$$\begin{cases} y = x - 4\\ y = 6x - 10 \end{cases}$$

(From Unit 5, Lesson 15.)

5. For what value of x do the expressions 2x + 3 and 3x - 6 have the same value?

(From Unit 4, Lesson 17.)