

Lesson 1 Practice Problems

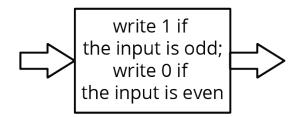
1. Given the rule:



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 4, Lesson 15.)

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

(From Unit 4, Lesson 14.)

5. For what value of x do the expressions 2x + 3 and 3x - 6 have the same value? (From Unit 4, Lesson 9.)