## 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 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $y n$ | 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: $\left\{\begin{array}{l}y=x-4 \\ y=6 x-10\end{array}\right.$
(From Unit 5, Lesson 15.)
5. For what value of $x$ do the expressions $2 x+3$ and $3 x-6$ have the same value?
(From Unit 4, Lesson 17.)
