

LESSON
1.7**Challenge Practice***For use with the lesson "Represent Functions as Rules and Tables"*

1. Make a table for the function $y = 3x^2 + 2$. Determine the domain values corresponding to range values of 2, 5, 14, and 29.
2. Make a table for the function $y = 2x^3 + 1$. Determine the domain values corresponding to range values of 3, 17, 55, and 251.
3. The function $y = x^2 + 1$ has the following table associated with it.

Input, x	-2	-1	0	1	2	3
Output, y	5	2	1	2	5	10

Suppose the function is reversed, making y the input and x the output. You would have to remove some of the values of y from the table in order to have x be a function of y . What would be the minimum number of y -values you would have to remove from the table in order to have x be a function of y ?

4. Refer to Exercise 3. What y -values would you have to remove from the table?
5. Consider the table for a function.

Input, x	-2	-1	n	1	2	3
Output, y	3	4	4	6	5	10

For what value of n would this table represent x as a function of y ?