Write the domain and range of each relation using interval notation. If a graph hits the end of the grid then assume it continues forever in that direction.

1. Domain: \((-\infty, \infty)\)
   Range: \((-\infty, \infty)\)
   \(f(-1) = -2\)
   \(f(5) = 2\)

2. Domain: \((-\infty, \infty)\)
   Range: \((-\infty, \infty)\)
   \(f(-1) = -\frac{1}{3}\)
   \(f(3) = 1\)

3. Domain: \([-5, 5]\)
   Range: \([-6, 6]\)
   \(f(-2) = 3\)
   \(f(5) = 6\)

4. Domain: \((-4, 6)\)
   Range: \((-2, 7)\)
   \(f(6) = -2\)
   \(f(-4) = 7\)

5. Domain: \([-6, 4]\)
   Range: \([-3, 5]\)
   \(f(-1) = 1\)
   \(f(-6) = -3\)

6. Domain: \((-5, 4)\)
   Range: \([-6, 6]\)
   \(f(1) = -6\)
   \(f(4) = \text{no value}\)
Use the given form of each relation to complete the other form shown. Then determine if the relation is a function.

7. Rewrite the relation given in the mapping as a graph.

\[
\begin{array}{c|c}
\text{x} & \text{y} \\
-3 & 3 \\
2 & 3 \\
-2 & 0 \\
0 & 0 \\
\end{array}
\]

Is the relation a function? NO

8. Rewrite the relation given as a graph as a mapping.

Is the relation a function? YES

9. Rewrite the relation in the table as a mapping.

10. Rewrite the relation in the graph as a set of ordered pairs.

\{(-2, 2), (-2, -2), (0, 1), (1, -1), (2, 0)\}

Is the relation a function? NO

11. For the mapping shown. Determine the following:

A. \( f(-3) = -1 \)

B. \( f(1) = -1 \)

C. \( f(2) = 0 \)