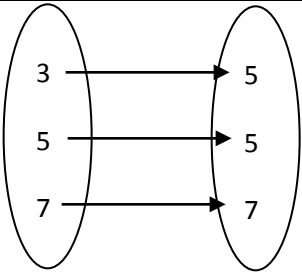# 5.8 To Function or Not To Function

A Practice Understanding Task

Determine if the following relationships are functions and then justify your reasoning.

1. A person's name versus their social security number.	2. A person's social security number versus their name.	3. The cost of gas versus the amount of gas pumped.
4. { (3,6), (4, 10), (8,12), (4, 10)}	5. The temperature in degrees Fahrenheit with respect to the time of day.	6. <table><tr><td>distance</td><td>days</td></tr><tr><td>6</td><td>2</td></tr><tr><td>10</td><td>4</td></tr><tr><td>6</td><td>5</td></tr><tr><td>9</td><td>8</td></tr></table>
7. The area of a circle as it relates to the radius.	8.	9. The radius of a cylinder is dependent on the volume.
10. The size of the radius of a circle dependent on the area.	11. Students letter grade dependent on the percent earned.	12. The length of fence needed with respect to the amount of area to be enclosed.
13. The explicit formula for the recursive situation below: $f(1) = 3$ and $f(n + 1) = f(n) + 4$	14. If x is a rational number, then $f(x) = 1$ If x is an irrational number, then $f(x) = 0$	15. The national debt with respect to time.