## 4.2 – Functions #1

A function can also be a rule with input values (the DOMAIN) and output values (the RANGE).

Domain: $-1, 0, 1$ 3,

1.

#  The rule is

 $2x+3$

Range:

Ordered pairs:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

### FUNCTION NOTATION: $f\left(x\right)=2x+3$

To find $f\left(-1\right)$ you replace $x$ with $-1$

$f\left(-1\right)=$

2. Find the range values of each function for the given domain values.

a) $f\left(x\right)=x^{2}-3$ $D=\left\{-2, 0, 2, 4\right\}$

b) $g\left(x\right)=-2x-4$ $D=\left\{-4, -1, 2, 6\right\}$

3. For $h\left(x\right)=\left\{\left(-2, 6\right), \left(2, 8\right), \left(4, 10\right), \left(6, 12\right), \left(8, 14\right)\right\}$ find the indicated value.

$h\left(6\right)=$ \_\_\_\_\_\_\_ $h\left(-2\right)=$ \_\_\_\_\_\_\_\_ $h\left(8\right)=$ \_\_\_\_\_\_\_\_\_

**If** $f\left(x\right)=2-3x$ **and** $g\left(x\right)=2x^{2}-1$**, find the following.**

4. $f\left(-2\right)=$ 5. $g\left(5\right)=$

6. $f\left(4\right)+g\left(-1\right)=$

7. Find the domain and range.



 Domain:\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Range:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_