

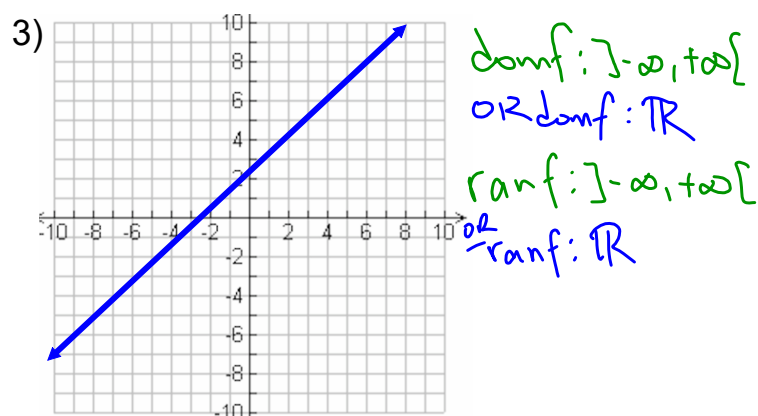
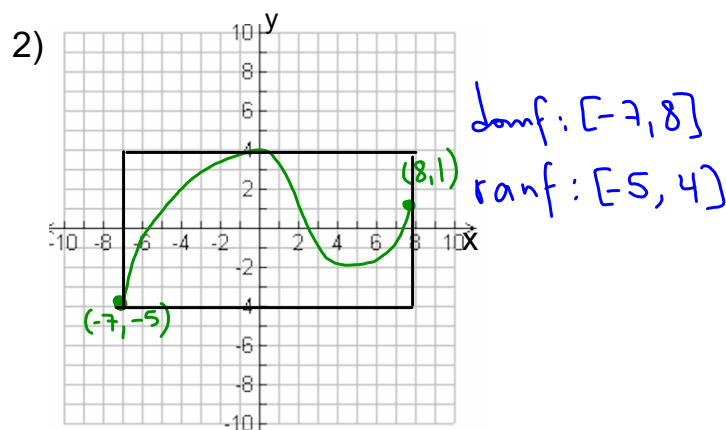
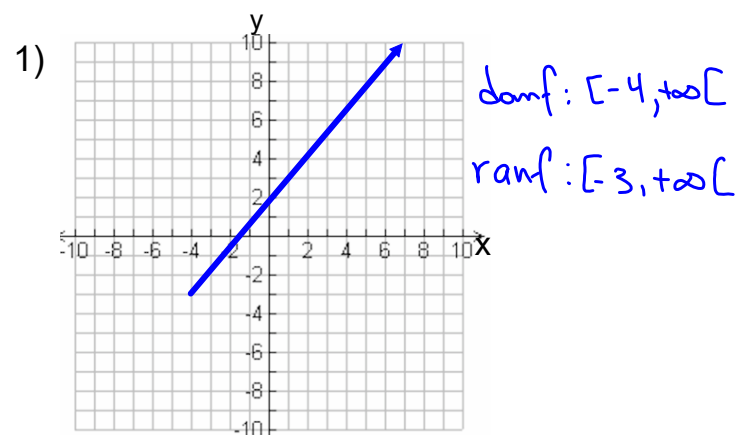
Domain and Range of a FunctionDomain (x):

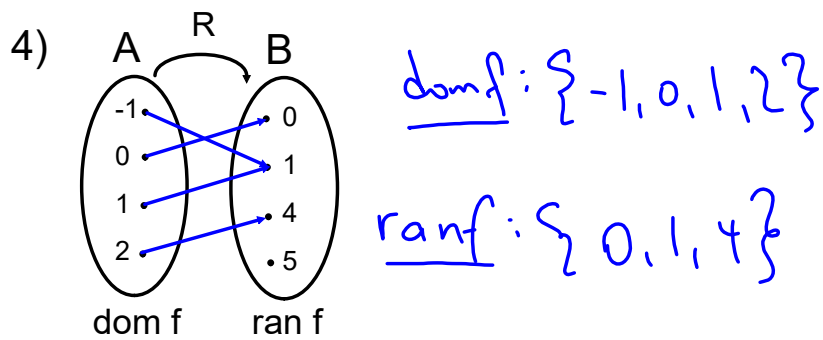
- The set of all values of x for which the relation is defined.
- Written $\text{dom } f$

Range (y):

- The set of all values of y for which the relation is defined.
- Written $\text{ran } f$

Examples: What is the domain and range for each of the following?





5) $f = \{(1,3), (2,4), (3,5), (4,6)\}$

$\text{dom } f: \{1, 2, 3, 4\}$

$\text{ran } f: \{3, 4, 5, 6\}$

*Note:

- Use $\{ \}$ when there are specific numbers
- Use $[]$ when dealing with intervals.

• $\mathbb{R} \rightarrow$ all Real #s
 $]-\infty, \infty[$

• $\mathbb{R}^* \rightarrow$ all Real #s excluding zero

• $\mathbb{R}_+ \rightarrow$ positive Real #s including 0.

• $\mathbb{R}_- \rightarrow$ negative Real #s including 0.

• $\mathbb{R}_+^* \rightarrow$ all positive non zero Real #s

• $\mathbb{Z} \rightarrow$ Integers (+ & -)