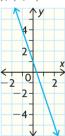
- **1.** Determine whether the following relations are functions. Explain.
  - a) (1, 3), (2, 3), (3, 2), (1, 4), (4, 1)

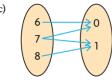
b)



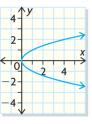
d)



c)



e)



2. Relations f and g are defined by

$$f = \{(1, 2), (2, 3), (3, 4)\}$$
 and  $g = \{(1, 2), (2, 1), (2, 3), (3, 0), (3, 4)\}.$ 

- a) State the domain and range of each relation.
- **b)** Is f a function? Is g? Explain.

**3.** Given the following, state the domain and range and whether the relation is a function.

a)



h



- **4.** i. A function *h* is defined by h(x) = 2x 5. Evaluate.
- a) h(-2) b) h(2m) c) h(3) + h(n)
- ii. A function g is given by  $g(x) = 2x^2 3x + 1$ . Evaluate.
  - a) g(-1) b) g(3m) c) g(0)