

Business PreCalculus MATH 1643 Section 004, Spring 2014
Answer key: Worksheet 13

1- Answers:

a. No, because for $x = -1$, $y = \pm 3$.

b. Yes, because for any element in the domain $D = (-\infty, -1) \cup (1, \infty)$ there is only one value of y .

2- Answers:

a. $f(3) = 1$.

b. $f(x + h) = x^2 + 2xh + h^2 - 3x - 3h + 1$.

3- Answers

a. $D = (-\infty, -1) \cup (-1, 1) \cup (1, \infty)$, or the domain is all real numbers except 1 and -1 .

b. $D = (-\infty, \infty)$, all real numbers.

c. $D = [-3, 1) \cup (1, \infty)$, all real numbers greater or equal to three except 1.

d. $D = (-\infty, 4)$.

4- Answers:

a. The y -intercept of f is: $(0, 0)$.

b. The x -intercepts are: $(0, 0)$ and $(-4, 0)$.