

# Lesson 11-1-4

11-38. a.  $x = 0, y = 3$  b.  $x = 2, y = 3$  c.  $x = -3, y = 3$  d. NO

11-39. a.  $x = 1, y = 2, z = 6$   
 b. There is no solution because you cannot divide by zero.  
 c. No, the error occurs when dividing that to happen.  
 d. All numbers except  $x = 0, x = -2$

11-40. a.  $x = 2, y = 3$  b.  $x = 2, y = 3$  c.  $x = 2, y = 3$   
 d. No, the error occurs when dividing. All the numbers are the same, so our description needs to include  $x = 2, y = 3$  not just the integers.

11-41. See solutions below.

a. D.  $-2 \leq x \leq 4, R. -3 \leq y \leq 3$  b. D.  $-2 \leq x \leq 4, R. -3 \leq y \leq 3$   
 c. D.  $-2 \leq x \leq 4, R. -4 \leq y \leq 2$  d. D.  $-2 \leq x \leq 4, R. y = 4$   
 e. D.  $-2 \leq x \leq 4, R. -3 \leq y \leq 2$

11-42. a. No, we only know that the integers used in the table about the numbers between the integers or those beyond the integers.  
 b. Not quite. If we know that the integers are  $-4, -3, -2, -1, 0, 1, 2, 3, 4$  and then the range would be the set of numbers greater than or equal to  $-4$ . However, since we do not know the integers, we cannot even assume that the integers are  $-4, -3, -2, -1, 0, 1, 2, 3, 4$  in the table.  
 c. No.

11-43. a.  $-1 < x < 0$  b. All values greater than  $-1$

11-44. There are many possible solutions. See example on page 11-1-4.

11-45. a. not a function as more than one  $y$  value is assigned to one  $x$  value.  
 b. appears to be a function.  
 c. not a function because there are two  $y$  values assigned to one  $x$  value.  
 d. function

11-46. a.  $x$ -intercepts  $(-1, 0)$  and  $(1, 0)$ ,  $y$ -intercept  $(0, 1)$   
 b.  $x$ -intercepts  $(-1, 0)$  and  $(1, 0)$ ,  $y$ -intercept  $(0, -1)$   
 c.  $x$ -intercepts  $(-2, 0)$  and  $(4, 0)$ ,  $y$ -intercept  $(0, 10)$   
 d.  $x$ -intercepts  $(-1, 0)$  and  $(1, 0)$ ,  $y$ -intercept  $(0, 1)$

11-47. I:  $y = 2x$ , M:  $y = 3x$

11-48. No; the slope of  $\overline{AB}$  is  $\frac{3}{5}$ , while the slope of  $\overline{AC}$  is  $\frac{3}{8}$  and the slope of  $\overline{BC}$  is  $\frac{3}{3}$ .

11-49. a.  $x = 6, y = 2$  b.  $x = 3, y = 9$  c.  $x = 1, y = 9$  d.  $x = 2, y = 9$