1. In the graph of the parametric equations (A) (B) (C) is any real number (D) (E)

2. The graph of is a (A) straight line (B) line segment (C) parabola (D) portion of a parabola (E) semicircle

3. Which of the following is (are) a pair of parametric equations that represent a circle? I. II. III. (A) only I (B) only II (C) only III (D) only II and III (E) I, II, and III

1. |2x – 1| = 4x + 5 has how many numbers in its solution set? (A) 0 (B) 1 (C) 2 (D) an infinite number (E) none of the above

2. Which of the following is equivalent to 1 |x – 2| 4? (A) 3 x 6 (B) x 1 or x ≥ 3 (C) 1 x 3 (D) x –2 or x ≥ 6 (E) –2 x 1 or 3 x 6

3. The area bound by the relation |x| + |y| = 2 is (A) 8 (B) 1 (C) 2 (D) 4 (E) There is no finite area.

4. Given a function, f(x), such that f(x) = f(|x|). Which one of the followingcould be the graph of f(x)? (A)  (B)  (C)  (D)  (E) 

5. The figure shows the graph of which one of the following?  (A) y = 2x – |x| (B) y = |x – 1| + x (C) y = |2x – 1| (D) y = |x + 1| – x (E) y = 2|x| – |x|

6. The postal rate for first-class mail is 44 cents for the first ounce or portion thereof and 17 cents for each additional ounce or portion thereof up to 3.5 ounces. The cost of a 3.5-ounce letter is 95¢. A formula for the cost in cents of first-class postage for a letter weighing N ounces (N 3.5) is (A) 44 + [N – 1] · 17 (B) [N – 44] · 17 (C) 44 + [N] · 17 (D) 1 + [N] · 17 (E) none of the above

7. If f(x) = i, where i is an integer such that i x < i + 1, the range of f(x) is (A) the set of all real numbers (B) the set of all positive integers (C) the set of all integers (D) the set of all negative integers (E) the set of all nonnegative real numbers

8. If f(x) = [2x] – 4x with domain 0 x 2, then f(x) can also be written as (A) 2x (B) –x (C) –2x (D) x2 – 4x (E) none of the above