1. If $x^2 + y^2 = 2xy$, then x must equal
   a. -1
   b. 0
   c. 1
   d. $-y$
   e. y

2. Which of the following has the greatest value?
   a. 1.73^{999}
   b. 2^{799}
   c. 3^{500}
   d. 4^{400}
   e. 250^{100}

3. Which of the following tables represents a function?

I.

Input	Output
1	4
2	4
3	6
4	6

II.

Input	Output
1	3
2	3
3	3
4	3

III.

Input	Output
1	3
1	4
2	5
3	6

   a. None
   b. I and II
   c. I and III
   d. II and III
   e. All of them

4. Which of the following represents the solution set of $|x^3 - 8| \le 5$?
   a. $-1.71 \le x \le 1.71$
   b. $0 \le x \le 3.21$
   c. $0.29 \le x \le 3.21$
   d. $1.44 \le x \le 2.35$
   e. $6.29 \le x \le 9.71$

5. If $f(x) = 2x^5$, then which of the following must be true?

   I. $f(x) = f(-x)$

   II. $f(-x) = -f(x)$

   III. $\dfrac{1}{2}f(x) = f\left(\dfrac{1}{2}x\right)$

   (A) I only
   (B) II only
   (C) I and III only
   (D) II and III only
   (E) I, II, and III

6. What is the distance between the *x*-intercept and the *y*-intercept of the line given by the equation $2y = 6 - x$?

    a. 3.67
    b. 6.32
    c. 6.71
    d. 7.29
    e. 8.04