POWERS OF 10

PART I: Write the value of each of the following.

1.
$$10^0 =$$

2.
$$10^1 =$$

3.
$$10^2 =$$

4.
$$10^3 =$$

5.
$$10^4 =$$

6.
$$10^5 =$$

7.
$$10^6 =$$

8.
$$10^7 =$$

9.
$$10^8 =$$

10.
$$10^9 =$$

PART II: Identify which number is larger by filling in the box with > or <

11.
$$10^8 \square 10^3$$

14.
$$10^{10}$$
 10^5

12.
$$10^2$$
 10^5

15.
$$10^{16}$$
 10^6

13.
$$10^{12}$$
 10^3

16.
$$10^4 10^7$$

PART III: Solve each of the following by adding. Express your answer in exponent form.

17.
$$10^6 + 10^1 = \underline{\hspace{1cm}}$$

18.
$$10^3 + 10^6 =$$

19.
$$10^5 + 10^5 =$$

20.
$$10^7 + 10^6 =$$

ANSWER KEY

PART I: Write the value of each of the following.

1.
$$10^0 = 1$$

2.
$$10^1 = 10$$

3.
$$10^2 = 100$$

4.
$$10^3 = 1,000$$

5.
$$10^4 = 10,000$$

6.
$$10^5 = 100,000$$

7.
$$10^6 = 1,000,000$$

8.
$$10^7 = 10,000,000$$

9.
$$10^8 = 100,000,000$$

10.
$$10^9 = 1,000,000,000$$

PART II: Identify which number is larger by filling in the box with > or <

11.
$$10^8 > 10^3$$

14.
$$10^{10} > 10^5$$

12.
$$10^2 < 10^5$$

15.
$$10^{16} > 10^6$$

13.
$$10^{12} > 10^3$$

16.
$$10^4 < 10^7$$

PART III: Solve each of the following by adding. Express your answer in exponent form.

17.
$$10^6 + 10^1 = 10^7$$

18.
$$10^3 + 10^6 = 10^9$$

19.
$$10^5 + 10^5 = 10^{10}$$

20.
$$10^7 + 10^6 = 10^{13}$$