Place Value / Scientific Notation

1. Write the place values corresponding to the powers of ten.

10^0	
10^1	tens
10^2	
10^3	thousands
10^4	

10^5	
10^6	
10^7	ten millions
10^8	
10^9	

2. Write in expanded form.

a. 2,839

b. 483

c. 10,540

d. 450,293

e. 407,000

f. 12,650,000

g. 500,000,000

h. 4,078,003

3. Write in normal form.

a. $8 \times 10^4 + 5 \times 10^2 + 7 \times 10^0$

b. $7 \times 10^6 + 5 \times 10^4 + 6 \times 10^3 + 6 \times 10^1$

c. $7 \times 10^9 + 1 \times 10^8 + 7 \times 10^7$

d. $6 \times 10^8 + 4 \times 10^6 + 5 \times 10^5 + 1 \times 10^4 + 2 \times 10^3$

e. $2 \times 10^9 + 3 \times 10^8 + 5 \times 10^6 + 8 \times 10^5 + 7 \times 10^4$

4. What is the place value of the underlined digit?

a. 30<u>2</u>,394

b. <u>4</u>,059,203

c. 2<u>3</u>.94

d. 98,3<u>8</u>9,000

e. 9<u>4</u>7,392,000,000

f. 8.<u>9</u>

5. Calculate without a calculator.

a. $10^6 - 10^3$

b. $10^5 - 10^4 + 50,000$

c. $10^4 - 10^2 - 1,000$

d. 295,209,328 − 7,399,800 − 25,906

e. $5 \times 10^6 + 456,200 + 1,293 + 45$