Scientific Notation (Review)

1. Write the following in scientific notation:

A. Mass of proton = .00000000000000000000000167

B. Speed of light = 29979000000

C. Population of the city = 49000000

D. Resistance force = .00000482

2. Write the following numbers in scientific notation. Round to hundredths, if necessary.

A. 3417000000

B. .00000000001245

C. 34647200

D. 253 million

E. .00000000125

F. .000000000933

3. Use scientific notation to perform the indicated operations

A. 204.1 + 2900 + .0125 + 136.078

B. 2097.62 – 10

C. 3.768 x .001

D. 720000 ÷ .0008

4. Write in scientific notation

A. .00000011052

B. 643000

C. .0963

D. 1365

E. 59325

F. .0009399

5. Use scientific notation to perform the indicated operations.

A. .0025÷500

B. $\sqrt{8.1\times10^{-5}}$

C. $(653\times10^{-6}\times504\times10^{6}\times12700)\div(312\times10^{6}\times.007\times6.82)$

D. $(2804\times74.23)\div(.0009006\times.008040)$

E. $1.32\times10^{-5}\times42000)\div(6.6\times10^{15})$

F. $(1.43\times10^{6}\times2.3\times10^{14})\div4100000000$

6. Write the following in scientific notation.

A. Volume of a raindrop = .001297

B. Repelling force = .00000076921

C. Population of city = 2987654

D. Capacitor rating = .01000000

7. Write the following numbers in scientific notation. Round to hundredths.

A. 55500

B. .01313

C. 5780000

D. .000635

E. .00156

F. 21111

8. Use scientific notation to perform the indicated operations

A. .0178 x .1110

B. 83.7/5.82

C. 2340.01 + 1.345 + .0045 + 21.01

D. 254.01 – 1.2352

9. Write in scientific notation

A. .36

B. 300

C. .000063

D. 5798000

E. .0004545

F. 435000

10. Use scientific notation to perform the indicated operations. Round to hundredths.

A. $(36000000 \times .000011) \div .0000033$

B. $54 \times .00005 \times 12000000$

C. $(3.2 \times 10^{9} \times 2.84 \times 10^{-8}) \div (1.28 \times 10^{-9})$

D. $\sqrt{625 \times 10^{12}}$

11. Round off the following numbers to thousandths:

A. 3415000000

B. .0000000513

C. 63.333

D. 5769000

E. 725777

F. .04002

12. Write the following in scientific notation.

A. Revolutions of a turntable = 2750062

B. Instantaneous current value = .00002971

C. Inductance value = .000000000800

D. Resistance value = 8000000

13. Write the following numbers in scientific notation.

A.	**.00871**	**C.**	**.00192**	**E.**	**.0805**
B.	**12430**	**D.**	**26220**	**F.**	**12300**

14. Use scientific notation to perform the indicated operations

A. 123.01 + 2.222 + .00123 + 10.100

B. 765200 – 210.76

C. .00054 x .0400

D. 322000 ÷.83

15. Write in scientific notation

A.	**.00394**	**C.**	**.0008775**	**E.**	**.04**
B.	**683750**	**D.**	**149200**	**F.**	**999999**

16. Use scientific notation to perform indicated operations. Round to thousandths if necessary.

A. $203 \times .000919$

B. $(.762 \times 10^4) \div (320 \times 10^3)$

C. $(.12 \times 10^5 \times 2 \times 8.4 \times 10^{-2}) \div (1.2 \times 10^5 \times 10^{-2})$

D. $(.00362 \times 10^4 \times 2 \times 10^{-3}) \div (.362 \times 10^5)$

E. $(7.03 \times 10^2 \times 3 \times 10^{-2}) \div .001$

F. $\sqrt{.0049 \times 10^{10}}$

Scientific Notation (Review)
Answer Key

1. Write the following in scientific notation:

A. Mass of proton = 1.67×10^{-24}
B. Speed of light = 2.9979×10^{10}
C. Population of the city = 4.9×10^{7}
D. Resistance force = 4.82×10^{-6}

2. Write the following numbers in scientific notation. Round to hundredths if necessary.

A. 3.42×10^{9}
B. 1.25×10^{-11}
C. 3.46×10^{7}
D. 2.53×10^{8}
E. 1.25×10^{-9}
F. 9.33×10^{-10}

3. Perform the indicated operations

A. 3240.1905 or 3.2401905×10^{3}
B. 2087.62 or 2.08762×10^{3}
C. 0.003768 or 3.768×10^{-3}
D. 900000000 or 9.0×10^{8}

4. Write in scientific notation

A. 1.1052×10^{7}
B. 6.43×10^{5}
C. 9.63×10^{-2}
D. 1.37×10^{3}
E. 5.53×10^{4}
F. 9.40×10^{-4}

5. Perform indicated operations.

A. 0.000005 or $5. \times 10^{-6}$
B. 0.0284605 or 2.84605×10^{-2}
C. 2,806.147079 or $2.8061477079 \times 10^{3}$
D. 21,364,325,390 or $2.136432539 \times 10^{10}$
E. .00000000000000084 or 8.4×10^{-17}
F. 802,195,122,000 or 3.46×10^{11}

6. Write the following in scientific notation.

A. Volume of a raindrop = 1.297×10^{-3}

B. Repelling force = 7.6921×10^{-7}

C. Population of city = 2.987654×10^{6}

D. Capacitor rating = 1.0×10^{-2}

7. Write the following numbers in scientific notation. Round to hundredths.

A. 5.55×10^{4}

B. 1.31×10^{-2}

C. 5.78×10^{6}

D. 6.35×10^{-4}

E. 1.56×10^{-3}

F. 2.11×10^{4}

8. Perform the indicated operations

A. 0.0019758 or 1.9758×10^{-3}

B. 14.3814433 or 1.43814433×10^{1}

C. 2362.3695 or 2.36236956×10^{3}

D. 252.7748 or 2.527748×10^{2}

9. Write in scientific notation

A. 3.6×10^{1}

B. 3.0×10^{2}

C. 6.3×10^{-5}

D. 5.798×10^{6}

E. 4.545×10^{-4}

F. 4.35×10^{5}

10. Perform indicated operations. Round to hundredths.

A. 120,000,000 or 1.2×10^{8}

B. 3240 or 3.24×10^{3}

C. 7,100,000,000 or 7.1×10^{9}

D. 25,000,000 or 2.5×10^{7}

11. Round off the following numbers to thousandths:

A. 3.415×10^{9}

B. 5.13×10^{-8}

C. 6.333×10^{1}

D. 5.769×10^{6}

E. 7.258×10^{5}

F. 4.002×10^{-2}

12. Write the following in scientific notation.

A. Revolutions of a turntable = 2.750062×10^{6}

B. Instantaneous current value = 2.971×10^{-5}

C. Inductance value = 8.0×10^{-10}

D. Resistance value = 8.0×10^{6}

13. Write the following numbers in scientific notation.

A. 8.971×10^{-3}

B. 1.243×10^{4}

C. 1.92×10^{-3}

D. 2.662×10^{4}

E. 8.05×10^{-2}

F. 1.23×10^{4}

14. Perform the indicated operations

A. 135.33323 or 1.353×10^{2}

B. 765410.76 or 7.6541076×10^{5}

C. 0.0000216 or 2.16×10^{-5}

D. 387951.8072 or $3.879518072 \times 10^{5}$

15. Write in scientific notation

A. 3.94×10^{-3}

B. 6.8375×10^{5}

C. 8.775×10^{-4}

D. 1.492×10^{5}

E. 4.0×10^{-2}

F. 9.99999×10^{5}

16. Perform indicated operations. Round to thousandths if necessary.

A. 0.186557 or 1.866×10^{-1}

B. 0.0238125 or 2.381×10^{-2}

C. 1.68 or 1.68×10^{0}

D. 0.00002 or $2. \times 10^{-5}$

E. 2,109,000 or 2.109×10^{6}

F. 22135.94362 or 2.214×10^{4}