

## Unit 1.3 Scientific and Engineering Notation

### 1. Fill in the blanks for Scientific Notation

a)  $1,000,000 = 10^?$  ? = \_\_\_\_\_

b)  $? = 10^5$  ? = \_\_\_\_\_

c)  $10,000 = 10^?$  ? = \_\_\_\_\_

d)  $? = 10^3$  ? = \_\_\_\_\_

e)  $100 = 10^?$  ? = \_\_\_\_\_

f)  $? = 10^1$  ? = \_\_\_\_\_

g)  $1 = 10^?$  ? = \_\_\_\_\_

h)  $? = 10^{-1}$  ? = \_\_\_\_\_

i)  $0.01 = 10^?$  ? = \_\_\_\_\_

j)  $? = 10^{-2}$  ? = \_\_\_\_\_

k)  $0.001 = 10^?$  ? = \_\_\_\_\_

l)  $0.0000001 = 10^?$  ? = \_\_\_\_\_

### 2. Convert the following from Standard Notation to Engineering Notation

a) 1,000 Volts (V) = \_\_\_\_\_

b) 15 Amps (A) = \_\_\_\_\_

c) 167,000 Ohms ( $\Omega$ ) = \_\_\_\_\_

d) 0.0005 Amps (A) = \_\_\_\_\_

e) 0.125 Amps (A) = \_\_\_\_\_

f) 250,000,000 Ohms ( $\Omega$ ) = \_\_\_\_\_

g) 0.0023 Amps (A) = \_\_\_\_\_

h) 23,000,000 Volts (V) = \_\_\_\_\_

3. Convert the Following from Engineering Notation to Standard Notation

a) 12 mA = \_\_\_\_\_

b) 15 k $\Omega$  = \_\_\_\_\_

c) 30 MV = \_\_\_\_\_

d) 112 mA = \_\_\_\_\_

e) 1.2 k $\Omega$  = \_\_\_\_\_

f)  $300 \text{ kV} = \underline{\hspace{10em}}$

g)  $40 \text{ uA} = \underline{\hspace{10em}}$

h)  $600 \text{ M}\Omega = \underline{\hspace{10em}}$