

Scientific (Exponential) Notation Worksheet

Name: _____

1. Express each of the following standard form numbers in scientific notation:

a. 75890 = _____ b. 1 = _____

c. 0.000189 = _____ d. 450000000 = _____

e. 8.75 = _____ f. 0.0000006098 = _____

2. Express each of the following in standard notation:

a. $4.56 \times 10^{-3} =$ _____ b. $1.25 \times 10^{14} =$ _____

c. $0 \times 10^5 =$ _____ d. $1.005005 \times 10^8 =$ _____

e. $2.4 \times 10^{-9} =$ _____ f. $1.567 \times 10^0 =$ _____

3. Express each of the following numbers in **correct** scientific notation:

a. $39.07 \times 10^{-14} =$ _____ b. $18.89 \times 10^5 =$ _____

c. $577.8 \times 10^{-6} =$ _____ d. $125.5 \times 10^{-2} =$ _____

e. $0.00854 \times 10^{-5} =$ _____ f. $0.00387 \times 10^5 =$ _____

g. $0.0000552 \times 10^2 =$ _____ h. $555.5 \times 10^4 =$ _____

4. Perform the following calculations and report your answers in scientific notation:

a. $(2.35 \times 10^5)(4.56 \times 10^{-3})(2 \times 10^4) =$ _____

b. $(1.375 \times 10^{12})(4.5 \times 10^{-5})(1.5 \times 10^{-3}) =$ _____

c. $(6.95 \times 10^6) / (4.09 \times 10^3) =$ _____

d. $(1.0003 \times 10^{-4}) / (8.056 \times 10^{-1}) =$ _____

e. $245 + 134 - 45 =$ _____

f. $(3.33 \times 10^1) - (6.689 \times 10^5) + (9.12 \times 10^3) =$ _____

g. $\frac{(4.5 \times 10^{-3})(7.8 \times 10^4)(1.32 \times 10^{11})}{(5.55 \times 10^{-4})(1.55 \times 10^{-3})(8.3 \times 10^7)} =$ _____

h. $\frac{(1.15 \times 10^{11})(6.88 \times 10^{-3})(9 \times 10^{-3})}{(2.56 \times 10^7)(7 \times 10^4)(9.2 \times 10^{-4})} =$ _____