Scientific Notation Practice

1. Change each of the following into correct scientific notation. Round off to one decimal place.

a) 0.00000581

b) 207000

c) 0.03152

d) 40300000

e) 0.00370

(f) 42893

(g) 4105000

(h) 0.0003025

(i) 28750

(j) 213

(k) 200500

(l) 3685000

(m) 30.025

(n) 102.5

(o) 0.356

2. Express each of the following in expanded form.

a) 2.54×10^{5}

b) 1.01×10^{-3}

c) 3.05×10^{7}

(d) 2.15×10^{-6}

(e) 9.22×10^{2}

(f) 9.22×10^{-2}

3. Calculate each of the following using correct significant digits.

a) $7 \times 10^{4} + 2 \times 10^{5}$

b) $8 \times 10^{-3} - 7 \times 10^{-4}$

c) $(3 \times 10^{2})(2 \times 10^{3})$

d) $(1.3 \times 10^{-3})(4 \times 10^{-5})$

e) $5 \times 10^{-2} + 3 \times 10^{-4}$

f) $(8 \times 10^{-5})(3 \times 10^{7})$

g) $(3.0 \times 10^{-3})^{3}$

h) 6.201 + 7.4 + 0.68 + 12.0

i) 475 - 0.4168

j) (3.2145)(4.23)

k) 3.1416 / 12.4

(l) $6.6 \times 10^{5} / 3.0 \times 10^{2}$

(m) $\dfrac{(3800)(0.0054)(0.0000001)}{(430000000)(0.00054)}$

(n) $(2 \times 10^{5})^{2}$

(o) $(2.0 \times 10^{4})^{2}(3.0 \times 10^{6})^{3}$

(p) $4 \times 10^{5} - 1 \times 10^{6}$

(q) $(-9 \times 10^{17})(6 \times 10^{-18})$

(r) $(-2.1 \times 10^{-2})^{3}$

(s) 10.8 + 8.264

(t) (131)(2.3)

(u) 20.2 / 7.41