

**CHE 101 - Homework - Ch 3b**  
**Calculations with SN/SF/Rounding**

Score: \_\_\_\_/20

Name: \_\_\_\_\_

Date: \_\_\_\_\_

[5 pt] 1. Solve the following problems. Show all work. Express your answers to the proper number of Significant Figures. Use Scientific Notation where appropriate.

(a)  $125 \times 0.23$

1(a) \_\_\_\_\_

(b)  $(1.258 \times 10^4)(2.5 \times 10^2)$

1(b) \_\_\_\_\_

(c)  $\frac{0.4278}{59.6}$

1(c) \_\_\_\_\_

(d)  $\frac{(452)(6.2)}{14.3}$

1(d) \_\_\_\_\_

(e)  $50.50 \times 24$

1(e) \_\_\_\_\_

[5 pt] 2. Solve the following problems. Show all work. Express your answers to the proper number of Significant Figures. Use Scientific Notation where appropriate.

(a)  $0.25 + 1.5 + 0.855$

2(a) \_\_\_\_\_

(b)  $12.62 + 1.5 + 0.25$

2(b) \_\_\_\_\_

(c)  $12,000 + 34.56 + 1250.00$

2(c) \_\_\_\_\_

(d)  $0.0050 - 0.0012 - 0.00075$

2(d) \_\_\_\_\_

(e)  $65.45 + 19.2 - 1.50$

2(e) \_\_\_\_\_

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[5 pt] 3. Solve the following problems. Show all work. Express your answers to the proper number of Significant Figures. Use Scientific Notation where appropriate.

(a)  $(0.0025)(12.50)$  3(a) \_\_\_\_\_

(b)  $25,000 + 250.5 + 9500$  3(b) \_\_\_\_\_

(c)  $\frac{200.0}{5.0}$  3(c) \_\_\_\_\_

(d)  $(0.00160)(0.075)$  3(d) \_\_\_\_\_

(e)  $(2.75 \times 10^{-13})(4.580 \times 10^{-3})$  3(e) \_\_\_\_\_

[5 pt] 4. Solve the following problems. Show all work. Express your answers to the proper number of Significant Figures. Use Scientific Notation where appropriate.

(a)  $\frac{2.85 \times 10^{12}}{3.0 \times 10^5}$  4(a) \_\_\_\_\_

(b)  $1.255 + 1.65 + 3.750$  4(b) \_\_\_\_\_

(c)  $\frac{18.0}{24.00}$  4(c) \_\_\_\_\_

(d)  $18.50 + 125.5 - 50$  4(d) \_\_\_\_\_

(e)  $(1.95 \times 10^{-13})(2.547 \times 10^8)$  4(e) \_\_\_\_\_