

Name: _____

Date: _____

Physics 20

Assignment 4

Significant Figures Worksheet

Part A. How many significant figures are in each value?

- | | | | | | |
|------------|-------|--------------|-------|------------|-------|
| 1) 1278.50 | _____ | 4) 0.00730 | _____ | 7) 4.32 | _____ |
| 2) 23000 | _____ | 5) 670 | _____ | 8) 2.60 | _____ |
| 3) 8.002 | _____ | 6) 0.0053567 | _____ | 9) 823.012 | _____ |

Part B. Round each of the following numbers to contain 4 significant figures.

- | | | | | | |
|-------------|-------|-----------|-------|------------|-------|
| 1) 0.005789 | _____ | 4) 0.147 | _____ | 7) 3.47 | _____ |
| 2) 942100 | _____ | 5) 271.91 | _____ | 8) 387465 | _____ |
| 3) 43.050 | _____ | 6) 6 | _____ | 9) 0.17693 | _____ |

Part C. Perform these operations, keeping the proper amount of significant figures in the answer.

- | | | | |
|--------------------------|-------|------------------------|-------|
| 1) $4.32 \times 1.98 =$ | _____ | 6) $3.15 \div 2.5 =$ | _____ |
| 2) $2.6 \times 3.78 =$ | _____ | 7) $2.74 \div 3.008 =$ | _____ |
| 3) $6.54 \times 0.370 =$ | _____ | 8) $35.7 \div 0.78 =$ | _____ |
| 4) $3.08 \times 5.2 =$ | _____ | 9) $2.3 \div 0.655 =$ | _____ |
| 5) $0.36 \times 0.02 =$ | _____ | 10) $0.58 \div 2.1 =$ | _____ |

Part D. Perform these operations, using the proper amount of significant figures in the answer.

- | | | | |
|------------------------|-------|-----------------------|-------|
| 1) $16.5 + 8 =$ | _____ | 6) $23.27 - 12.058 =$ | _____ |
| 2) $13.25 + 9.6 =$ | _____ | 7) $13.57 - 6.3 =$ | _____ |
| 3) $2.36 + 0.355 =$ | _____ | 8) $350.0 - 200 =$ | _____ |
| 4) $0.0853 + 10.037 =$ | _____ | 9) $27.68 - 14.369 =$ | _____ |
| 5) $25.37 + 8.056 =$ | _____ | 10) $15.07 - 6.850 =$ | _____ |