**Physics – Honors Review Problem Set Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Determine the number of significant figures in each value. Cross out non-significant digits.**

1. 425,000 \_\_\_\_\_
2. 0.0036085 \_\_\_\_\_
3. 900,000,000 \_\_\_\_\_
4. 0.00006750 \_\_\_\_\_

**Determine the number of significant figures in each value.**

1. 9.75 x 104 \_\_\_\_\_
2. 2.0081 x 10-7 \_\_\_\_\_
3. 3.2 x 106 \_\_\_\_\_
4. 8.652 x 10-4 \_\_\_\_\_

**Write each value in scientific notation with the same number of significant figures.**

1. 425,000 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. 0.0036085 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. 900,000,000 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. 0.00006750 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Write each value in standard form with the same number of significant figures.**

1. 9.75 x 102 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. 2.0081 x 10-7 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. 3.2 x 106 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. 8.652 x 10-4 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Solve each dimensional analysis problem. Show all work and write answers with appropriate units and significant figures.**

1. Determine how many microseconds old you will be when you turn 18 years old.
2. A car travels 60. miles per hour. Convert this to feet per day. (*5,280 feet = 1 mile)*

1. The Sun is 93 million miles from Earth. Convert this distance to meters. (*2.54 cm = 1 inch)*