SIG FIG PROBLEM SET Name:

PART 1: List how many sig figs there are in the following numbers :

1. 500
2. 500.
3. 100.1
4. 0.000124
5. 1.2500
6. 2.100 x 10-4
7. 1.234 x 106

PART 2: Do the following addition/subractions to the correct number of sig figs. YOU MUST SHOW YOUR WORK!

1. 12.32 + 0.123 + 124.3 + 13.401
2. 9.113 – 0.001
3. 10.00 + 100.
4. 1.212-0.1
5. 1.10 x 10-3 - 9.00 x 10-4
6. 6.1 x 10-3 + 1.1 x 10-2

PART 3: Do the following multiplications/divisions to the correct number of sig figs.

1. 12 x 100 =
2. 12 x 100. =
3. 1.20 x 101 x 100 =
4. 3.13 x 104 / 2.100 x 102 =
5. (12.04)(9.26) – (58.04)(0.153) =
6. (125.08 – 120.03)

\_\_\_\_\_\_\_\_\_\_\_\_\_\_ =

(0.00692- 0.0035)

g) 15.84 + (0.892)(5.624)

\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ =

25.2 0.1043

Part 4: Unit Conversions: Show all work. Watch the units and sig. figs.

* 1. A car travels at a speed of 80.00 km/hr.

i. How many hours does it take to travel 450.0 km?

ii. How many km does the car travel in 81 min?

b) An unknown metal has a density of 19.34 g/cm3. What is the mass of 0.758 cm3 of gold?

c) Convert 0.00072 m to um