Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**How many significant figures?**

1) 620 \_\_\_\_\_\_\_ 2) .00489 \_\_\_\_\_\_\_ 3) 8500.1 \_\_\_\_\_\_\_

4) 52.0 \_\_\_\_\_\_\_ 5) 1000 \_\_\_\_\_\_\_ 6) 730.730 \_\_\_\_\_\_\_

7) 5000.0 \_\_\_\_\_\_\_ 8) 0.0780 \_\_\_\_\_\_\_ 9) 108 \_\_\_\_\_\_\_

10) 7.5 x 10-5 \_\_\_\_\_\_ 11) 1001 \_\_\_\_\_\_\_ 12) 500,000 \_\_\_\_\_\_\_

13) 5.40 \_\_\_\_\_\_\_ 14) 210 \_\_\_\_\_\_\_ 15) 0.00120 \_\_\_\_\_\_\_

**Round the following numbers to three significant digits.**

16) 245,763 \_\_\_\_\_\_\_\_\_\_ 17) 1 \_\_\_\_\_\_\_\_\_\_

18) .000024 \_\_\_\_\_\_\_\_\_\_ 19) 70.0035 \_\_\_\_\_\_\_\_\_\_

20) 1,566,311 \_\_\_\_\_\_\_\_\_\_ 21) 0.0011672 \_\_\_\_\_\_\_\_\_\_

**Addition/Subtraction:**

22) 75 + 15.7 = \_\_\_\_\_\_\_\_\_\_\_\_ 23) 850.05 –5.2 = \_\_\_\_\_\_\_\_\_\_\_\_

24) .758 + .2291 = \_\_\_\_\_\_\_\_\_\_\_\_ 25) 42.07 – 9.1 = \_\_\_\_\_\_\_\_\_\_\_

26) 17.0 + 400.72 + 1756 = \_\_\_\_\_\_\_\_\_\_\_\_ 27) 1.77 + 5.999 + 25 = \_\_\_\_\_\_\_\_\_\_\_\_

**Multiplication/Division:**

28) 15.72 / 7 = \_\_\_\_\_\_\_\_\_\_ 29) 708 x 4.182 = \_\_\_\_\_\_\_\_\_\_

30) 53.2 x 150 = \_\_\_\_\_\_\_\_\_\_ 31) 14.6 / 270.0 = \_\_\_\_\_\_\_\_\_\_

32) 167.0 / .4000 = \_\_\_\_\_\_\_\_\_\_ 33) 35.8 x 40 = \_\_\_\_\_\_\_\_\_\_

34) 84,592 x 0.00523 = \_\_\_\_\_\_\_\_\_\_ 35) 15.075 / 0.17 = \_\_\_\_\_\_\_\_\_\_

**\* Write the number of significant figures:**

1) 418 mL \_\_\_\_\_\_\_\_\_\_ 2) 0.017 g \_\_\_\_\_\_\_\_\_\_

3) 300.6 mm \_\_\_\_\_\_\_\_\_\_ 4) 0.00620 L \_\_\_\_\_\_\_\_\_\_

5) 1.2 g/mL \_\_\_\_\_\_\_\_\_\_ 6) 0.25° C \_\_\_\_\_\_\_\_\_\_

7) 3 x 106 s \_\_\_\_\_\_\_\_\_\_ 8) 0.10040 mm Hg \_\_\_\_\_\_\_\_\_\_

9) 7.2575 cm2 \_\_\_\_\_\_\_\_\_\_ 10) 16.0000 mg \_\_\_\_\_\_\_\_\_\_

11) 75.456 g \_\_\_\_\_\_\_\_\_\_ 12) 0.00033 g \_\_\_\_\_\_\_\_\_\_

13) 0.534 dm3 \_\_\_\_\_\_\_\_\_\_ 14) 1.00033 km \_\_\_\_\_\_\_\_\_\_

15) 90.000 m3 \_\_\_\_\_\_\_\_\_\_ 16) 0.0006070 kg \_\_\_\_\_\_\_\_\_\_

17) 905 m2 \_\_\_\_\_\_\_\_\_\_ 18) 0.00236 cm \_\_\_\_\_\_\_\_\_\_

19) 70.040 K \_\_\_\_\_\_\_\_\_\_ 20) 8.020 m \_\_\_\_\_\_\_\_\_\_

**\* Perform the operation. Don’t forget to round to the appropriate number of significant figures!!**

21)      6.201 cm  +  7.4 cm  +  0.68 cm  + 12.0 cm  =

22)     8.264 g - 7.8 g   =

23)     10.4168 m - 6.0 m    =

24)     12.00 m + 15.001 kg   =

25)     131 cm x 2.3 cm   =

26)     5.7621 m x 6.201 m   =

27)    20.2 cm / 7.41 s   =

28)    40.002 g  / 13.000005 mL  =

29) 17 + 42.76 + 4.2 =

30) 425.77 x 1.35 =