

Name:

Period:

Seat#:

State the number of significant digits in each measurement.

1) 2804 m	2) 2.84 km	3) 5.029 m	4) 0.003068 m
5) 4.6×10^5 m	6) 4.06×10^{-5} m	7) 75,000 m	8) 750 m
9) 75 m	10) 75.00 m	11) 75,000.0 m	12) 10 cm

Round the following numbers as indicated:

To four figures:

13) 3.682417	14) 21.860051	15) 375.6523	16) 112.511	17) 45.4673
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To one decimal place:

18) 1.3511	19) 2.473	20) 5.687524	21) 7.555	22) 8.235
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To two decimal places:

23) 22.494	24) 79.2588	25) 0.03062	26) 3.4125	27) 41.86632
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Solve the following problems and report answers with appropriate number of significant digits.

28) $6.201 \text{ cm} + 7.4 \text{ cm} + 0.68 \text{ cm} + 12.0 \text{ cm} =$	29) $1.6 \text{ km} + 1.62 \text{ m} + 1200 \text{ cm} =$
30) $8.264 \text{ g} - 7.8 \text{ g} =$	31) $10.4168 \text{ m} - 6.0 \text{ m} =$
32) $1.31 \text{ cm} \times 2.3 \text{ cm} =$	33) $5.7621 \text{ m} \times 6.201 \text{ m} =$
34) $20.2 \text{ cm} / 7.41 \text{ s} =$	35) $12.00 \text{ kg} + 15.001 \text{ kg} =$

Dougherty Valley HS Chemistry
Significant Figure Practice 2

Express the following numbers in scientific notational form:

36) 123,876.3	37) 1,236,840	38) 422000
39) 0.000000000000211	40) 0.000238	41) 0.0000205

Solve the sums or differences of the following with correct sig figs:

42) $(8.41 \times 10^4) + (9.71 \times 10^4) =$	43) $(5.11 \times 10^2) - (4.2 \times 10^2) =$
44) $(8.2 \times 10^3) + (4.0 \times 10^3) =$	45) $(6.3 \times 10^{-2}) - (2.1 \times 10^{-2}) =$

Solve the product and the quotients of the following with correct sig figs:

46) $(3.56 \times 10^5) (4.21 \times 10^6) =$	47) $(2 \times 10^7) (8 \times 10^{-9}) =$
48) $(4.11 \times 10^{-6}) (7.51 \times 10^{-4}) =$	49) $8.45 \times 10^7 / 6.74 \times 10^3 =$
50) $9.7 \times 10^8 / 8.6 \times 10^{-2} =$	51) $4.7 \times 10^{-2} / 5.7 \times 10^{-6} =$