CP Physics Practice Quiz A, B, C, D / 30 Name: _____
Unit 1 Math review Date: _____

1. State the number of significant digits in each of the following. 1 pt each.

a. 341 = _____ b. 80.0 = _____ c. 850 = _____

d. 0.030795 = _____ e. 5.01 = _____ f. 3030 = _____

g. $40\overline{0}0$ = _____ h. 0.0510 = _____ i. 5.0×10^3 = _____

2. Solve each of the following in proper significant digits and scientific notation. 1 pt. each.

a. 189 x 2.1 = _____

b. 28.80 / 7.20 = _____

3. Describe the difference between accuracy and precision. 2 pts.

4. Using the factor label method (dimension analysis) convert the following. Show your work! 2 pts. each.

75 mi/hr = _____ km/hr 400 kg/ml = _____ g/l

5. John uses a scale to mass a heavy object. The scale was set to a known standard that morning. John determines the mass to be 7.5 kg on his first measurement and to be 6.5 kg on his next measurement. Determine if this reading was Accurate, Precise, or both. Explain! 2 pts.

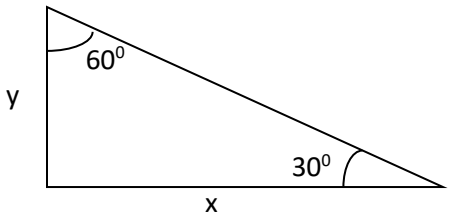
6. State four of eight rules for determining significant digits. 4 pts.

7. What is the importance of using significant digits? 2 pts.

8. For each of the following, write the finished equation. 3 pts.

Sine = _____ Cosine = _____ Tangent = _____

9. One angle of a right triangle is 30 degrees. The length of the hypotenuse is 45 cm. Calculate the lengths of the other two sides. 2 pts.



Bonus: From the triangle below, calculate side "c". Side "a" equals 16 cm, Side "b" equals 25 cm. 5 pts.

$c^2 = a^2 + b^2 - 2abcos\ c$