Quiz 1

Problem Solving in C
(CSCE 105, Spring 2006)
URL: http://www.cse.unl.edu/~cstrope/csce105s06/
11th January, 2006

(20 points)

Name:
Course No: CSCE105

1. (1 point each): Evaluate the following formulas if \( x = 3, y = -9, \) and \( z = 2 \):

(a) \( 2x^2 + 7y \)

(b) \( \sqrt{|y|} \)

(c) \( z^2 + x^0 \)

(d) \( z^{-2} \)

(e) \( x/z + -y \)
2. (1 point each)
Solve the following equations for \( x \) (The above values are no longer valid):

(a) \( \frac{1}{x} + y = 2z \)

(b) \( xy = \frac{2u}{v} \)

(c) \( x^2 - 2x = -1 \)

(d) \( \frac{x^2}{y^2} + 3z = 5y \)

(e) \( 4y^2 = \frac{2}{x} - 2x^2 \)
3. (2 points each)
Circle the correct answer for the following questions (Circles that appear to contain two of the answers will automatically be counted as incorrect):

(a) If Leah is 6 years older than her sister, Sue, and John is 5 years older than Leah, and the total of their ages is 41. Then how old is Sue?
   a. 8
   b. 10
   c. 14
   d. 19
   e. 21

(b) Grace has 16 jellybeans in her pocket. She has 8 red ones, 4 green ones, and 4 blue ones. What is the minimum number of jellybeans she must take out of her pocket to ensure that she has one of each color?
   a. 4
   b. 8
   c. 12
   d. 13
   e. 16

(c) Lee worked 22 hours this week and made $132. If she works 15 hours next week at the same pay rate, how much will she make?
   a. $57
   b. $90
   c. $104
   d. $112
   e. $122

(d) Two angles of a triangle measure $15^\circ$ and $85^\circ$. What is the measure for the third angle?
   a. $50^\circ$
   b. $55^\circ$
   c. $60^\circ$
   d. $80^\circ$
   e. $90^\circ$

(e) Which of the following is equal to $5.93 \times 10^{-2}$?
   a. 0.0593
   b. 0.00593
   c. 593
   d. 5.93
   e. 59.3