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)
$$z^z + x^0$$

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 (1 point each) Solve the following equations for x (The above values are no longer valid):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

(b)
$$xy = 2u/v$$

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

(d)
$$x^2/y^2 + 3z = 5y$$

(e)
$$4y^2 = 2/x - 2x^2$$

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^o and 85^o . What is the measure for the third angle?
 - a. 50^{o}
 - b. 55°
 - c. 60°
 - d. 80^{o}
 - e. 90^{o}
- (e) Which of the following is equal to 5.93×10^{-2} ?
 - a. 0.0593
 - b. 0.00593
 - c. 593
 - d. 5.93
 - e. 59.3