

Prerequisite Test

BASICS OF COMPUTING
(CSCE 101, SPRING 2007)

URL: <http://my.unl.edu>

16th January, 2007

(20 points)

Name :
Course No : **CSCE105**

1. (1 point each) Evaluate the following:

(a) 4^3

(b) 7^0

(c) $5!$

(d)

$$\begin{array}{r} 4 \text{ ft } 8 \text{ in} \\ + 12 \text{ ft } 6 \text{ in} \\ \hline \end{array}$$

(e)

$$\begin{array}{r} 5.766 \times 10^2 \\ + 4.56 \times 10^3 \\ \hline \end{array}$$

2. (4 points) How many different ways are there to arrange the four letters A, B, C, and D? (Each letter appears exactly once in each ‘word’.)

Answer Box:

3. (4 points) How many different numbers can be written using three digits, each of which may be chosen from 0 through 9? How many if they may be chosen from 0 and 1?

Answer Box:

- 0–9

- 0 and 1

4. (1 point each) Given the set of steps:

1. Put a log on the fire
2. Wait 5 minutes.
3. If the temperature is still below 75, repeat steps 1–3.
4. Lie back and relax

At which temperatures would step 4 be reached? (*Circle all that apply*)

- (a) 74
- (b) 72
- (c) 75
- (d) 78

5. (3 points) Given the equation:

$$x^2 - 7x + 12 = 0$$

What is the value of x ?

Answer Box: