

Dr. Raja Latif. Math131-02-072 Second Quiz Test-2

Department of Mathematics and Statistics, King Fahd University of Petroleum and Minerals  
Marks: 20, Time: 10 Minutes, Ch. 8.1-8.2 Wednesday, May 14, 2008

NAME: \_\_\_\_\_, I.D# \_\_\_\_\_ Sec# 02

**\*NOTE – Show complete work for full credit. The questions are not in any order of difficulty at all. Write the exact number after simplifying your calculations by using calculator.**

First Exam Question347JA9RL (Marks:10)

(Location of office Typists).

An office manager must locate 12 typists into three offices, which hold 7, 4, and 1 typists, respectively.

In how many ways can the three groups be chosen to occupy the three offices?

- (A) 27720
- (B) 18480
- (C) 7920
- (D) 13860
- (E) 16632
- (F) 3960
- (G) 660
- (H) 5544
- (I) 2970
- (J) 479001600
- (K) 17280
- (L) 34560
- (M) 25920

(N) None of the above choices is correct and the correct answer is given in the following: Write your answer below very carefully. It should be a natural number.

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Second Exam Question389TB26(Marks:10)

(Combination Lock).

A combination lock has 20 different letters, and a sequence of FIVE different letters must be selected for the lock to open.

How many combinations are possible.

- (A) 358800
  - (B) 303600
  - (C) 255024
  - (D) 212520
  - (E) 175560
  - (F) 15600
  - (G) 1860480
  - (H) 1395360
  - (I) 1028160
  - (J) 742560
  - (K) 524160
  - (L) 14950
  - (M) 12650
  - (N) None of the above choices is correct and the correct answer is given in the following: Write your answer below very carefully. It should be a natural number.
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