

Quiz 1

Please answer all questions

	1	2	3	4	5	6	7
Answer Grid:	8	9	10				

Multiple Choice Questions (use the answer grid).

- There are two letters C and D. If repetitions such as CC are permitted, how many permutations are possible?
(a) 1 (b) 0 (c) 4 (d) 8
- An electronics firm manufactures three models of stereo receivers, two cassette decks, four speakers and three CD players. When the four types of components are sold together, they form a "system." How many different systems can the electronic firm offer?
(a) 36 (b) 18 (c) 72 (d) 144
- A probability is usually expressed as a decimal, such as 0.70 or 0.27, but it may be given as a fraction, such as $7/10$ or $27/100$.
 - The closer a probability is to 0, the more likely that an event will happen.
 - The closer the probability is to 1.00, the more likely an event will not happen.

(a) (i), (ii) and (iii) are all correct statements
(b) (i) is a correct statement but not (ii) or (iii).
(c) (i) and, (iii) are correct statements but not (ii).
(d) (ii) and, (iii) are correct statements but not (i).
- A builder has agreed not to erect all "look alike" homes in a new subdivision. Five exterior designs are offered to potential homebuyers. The builder has standardized three interior plans that can be incorporated in any of the five exteriors. How many different ways are the exterior and interior plans offered to potential homebuyers?
(a) 8 (b) 10 (c) 15 (d) 30
- A lamp manufacturer has developed five lamp bases and four lampshades that could be used together. How many different arrangements of base and shade can be offered?
(a) 5 (b) 10 (c) 15 (d) 20
- What does $\frac{6!2!}{4!3!}$ equal?
(a) 640 (b) 36 (c) 10 (d) 120
- A sample of single persons receiving social security payments revealed these monthly benefits: \$826, \$699, \$1,087, \$880, \$839 and \$965. How many observations are below the median?
(a) 0 (b) 1 (c) 2 (d) 3
- The U.S. Department of Education reported that for the past six years 23, 19, 15, 30, 27 and 25 women received doctorate degrees in computer and information sciences. What is the mean arithmetic annual number of women receiving this degree?
(a) 15.1 (b) 23.2 (c) 37.9 (d) 22.9
- The number of work stoppages in a highly industrialized region for selected months are: 6, 0, 10, 14, 8 and 0. What is the median number of stoppages?
(a) 0 (b) 6 (c) 7 (d) 8
- The result of a particular experiment is called a(n)
(a) observation. (c) event.
(b) conditional probability. (d) outcome.