Embedded Questions for MGF1106

1. In a fraternity with 35 members, 18 take mathematics, 5 take both mathematics and chemistry, and 8 take neither mathematics nor chemistry. How many take chemistry but not mathematics?

   A) 10   B) 9   C) 14   D) 17

2. The negation of   *All Dogs go to Heaven* is:

   A. No dog goes to Heaven.
   B. All dogs go to Hell.
   C. Some dogs do not go to Heaven.
   D. Some dogs go to Heaven, some go to Hell.

3. The frequency setting for a garage door opener is determined by the positions of nine switches, each of which can be set to a "+" or "-" position. In how many ways can the switches be set?

   A) 632 ways   B) 512 ways   C) 81 ways   D) 19,683 ways

4. You are playing a game in which a single die is rolled. If a 2 or a 5 comes up, you win $42, otherwise you lose $36. What is your expected value for the game?

   A) $10   B) -$10   C) $12   D) -$12

5. The following data gives the number of applicants that applied for a job at a given company each month of 1999: 64, 67, 92, 77, 78, 84, 86, 89, 91, 92, 73, 64. What is the mean of the data?

   A) There is no mean.   B) 79.75   C) 95.7   D) 74.42

6. The odds of a horse winning a race is 3:10. The odds against him winning are
   A) 10:3   B)3:1   C)7:3   D)7:10

7. A single card is drawn from a standard 52-card deck. Find P(heart│red).
   A) 0   B) 1/2   C) 3/4   D) 1

8. If each angle of a regular polygon measures 140°, how many sides does it have?
   A) 11 sides   B) 1 side   C) 3 sides   D) 9 sides