Hospitality and Tourism Hotel Management Multiple Choice Math Assessment Problems



All math problems address TEKS 130.223. Hotel Management.

(1) The student gains academic knowledge and skills required to pursue the full range of career and postsecondary education opportunities within the hotel industry. The student is expected to:

(C) calculate correctly using numerical concepts such as percentage and reasonable estimation in practical situations.

Question 1. In 2008, 4% of the jobs in the hotel industry in the United States were hotel and motel managers. If there were 59,800 hotel and motel managers in 2008, how many total people were employed in the hotel industry in the entire United States?

a. 2,392
b. 239,200
c. 975,400
d. 1,495,000

(8) The student uses information technology tools specific to hotel management to access, manage, integrate, and create information. The student is expected to:

(E) evaluate internet resources for industry information.

Question 2. The chart below shows the results of an advertising survey given by a hotel.



Advertising Survey

Which of the following is a conclusion that is not supported by the advertising survey?

- a. More than twice as many people watch TV as read the newspaper.
- b. 18% of the hotels business comes from referrals.
- c. Most people came to the hotel because of television advertising.
- d. A total of 28 people took the survey.

(1) The student gains academic knowledge and skills required to pursue the full range of career and postsecondary education opportunities within the hotel industry. The student is expected to:

(C) calculate correctly using numerical concepts such as percentage and reasonable estimation in practical situations.

(3) The student solves problems using critical thinking, innovation, and creativity independently and in teams. The student is expected to:

(C) use principles of budgeting and forecasting to maximize profit and growth.

Question 3. Glenda is the manager at the Math Motel. She has developed a function relating the customers *c* and the profit P(c) on any given night to be P(c) = 67.99c - 2376. Given that this function is true, how many customers must be staying every night in order to break even?

- a. 24
- b. 34
- c. 35
- d. 67

(2) The student uses verbal and nonverbal communication skills to create, express, and interpret information for providing a positive experience for guests and employees. The student is expected to:

(B) analyze various marketing techniques for a hotel or an available service.

Question 4. Look over the chart below.



Which of the following statements is best supported by the data in the chart?

- a. Newspaper advertising is the best way to advertise.
- b. Television advertising is the most efficient way to advertise.
- c. Internet advertising is the best way to advertise.
- d. Television advertising brought in the most customers.

(2) The student uses verbal and nonverbal communication skills to create, express, and interpret information for providing a positive experience for guests and employees. The student is expected to:

(B) analyze various marketing techniques for a hotel or an available service.

Question 5. Mr. Bradley uses the expression $\frac{c}{m+c} \cdot 100$ to determine advertising efficiency, where *m* is money spent and *c* is customers brought in by that advertising. Using the advertising efficiency expression and the chart in problem #4, what is the most efficient way for Mr. Bradley to advertise?

- a. Television
- b. Newspaper
- c. Billboard
- d. Internet

(1) The student gains academic knowledge and skills required to pursue the full range of career and postsecondary education opportunities within the hotel industry. The student is expected to:

(C) calculate correctly using numerical concepts such as percentage and reasonable estimation in practical situations.

Question 6. The Super 20 Hotel currently contracts out their cleaning service to Great Maids cleaners who charge \$50 a room. They also charge an additional \$185 no matter how many rooms they clean. Which equation could be used to determine the cost *C* of the Great Maids cleaning *n* rooms?

- a. C = 20n + 185
- b. C = 185n + 50
- c. n = 50C + 185
- d. C = 185 + 50n

(1) The student gains academic knowledge and skills required to pursue the full range of career and postsecondary education opportunities within the hotel industry. The student is expected to:

(C) calculate correctly using numerical concepts such as percentage and reasonable estimation in practical situations.

Question 7. The Great Maids cleaning service charges \$50 per room cleaned plus a \$185 fee every time they come out to clean. The Spic-n-Span cleaning service charges \$65 per room but does not charge any other fees. How many rooms would need to be cleaned for Great Maids to be a better service to use?

a. 4b. 10c. 13d. 15

(3) The student solves problems using critical thinking, innovation, and creativity independently and in teams. The student is expected to:

(B) employ critical-thinking and interpersonal skills to resolve conflicts with individuals such as coworkers, employers, customers, and clients.

Question 8. Analyze the chart below.



Employee Success

The chart above is data taken from a survey given to hotel managers and hotel employees where employees rated their effort and managers rated the same employees' success. What type of correlation exists?

- a. Positive Correlation
- b. Negative Correlation
- c. No Correlation
- d. Constant Correlation

(1) The student gains academic knowledge and skills required to pursue the full range of career and postsecondary education opportunities within the hotel industry. The student is expected to:

(C) calculate correctly using numerical concepts such as percentage and reasonable estimation in practical situations.

Question 9. If Mrs. Smith uses the chart in problem #8 and rates an employee's success at 2.5, what level of employee effort should Mrs. Smith expect the employee to report?

a. 1.5
b. 2
c. 2.5
d. 3

(1) The student gains academic knowledge and skills required to pursue the full range of career and postsecondary education opportunities within the hotel industry. The student is expected to:

(C) calculate correctly using numerical concepts such as percentage and reasonable estimation in practical situations.

Question 10. In a recent research report, it was found out that 96% of all hotel managers have some post secondary education. If 356 high school graduates with no secondary education are working in Fort Worth area hotels, how many can expect to become managers statistically?

a. 0 b. 14 c. 341 d. 356

Answer Key

- 1) D
- 2) A
- 3) C
- 4) D
- 5) D
- 6) D
- 7) C
- 8) A
- 9) C
- 10) B