**OM 302 S23 Test 4 (Final) W Key**

**5/16/23**

00:30:00

Last Name:  


First Name:  


Email address:  


University's ID (last 4 digits):  


This is your Test 4 answer sheet. You have 30 minutes to enter your answers. You are allowed one attempt. Please note the following:  
1. When you are on the page with the problem #10, do not click” next" unless you ready to submit your work for grading.  
2. Some problems are "multiple response" and will require more than one answer.  
3. Please pay attention to the statements: "round up" and "absolute value".  
.  
  
Good Luck!!!

**Question 1 of 10**

Problem 1.

* a) In this section select, which solution is more cost effective: (0 points)
* Single-channel (0 points)
* Two-channel (10 points)
* Both are equally effective (0 points)
* None of these solution is economically effective. (0 points)
* b) In this section, select the cost of a two-channel solution: (0 points)
* $4 (0 points)
* $21 (0 points)
* $120 (0 points)
* $20 (0 points)
* $25 (0 points)
* $63.81 (10 points)
* 0.8 (0 points)
* c) In this section, select the value of a one-channel solution: (0 points)
* $120 (10 points)
* $94 (0 points)
* $124 (0 points)
* $12 (0 points)
* $0 (0 points)
* d) In this section, select the utilization rate: (0 points)
* 1.1 (0 points)
* 0.8 (10 points)
* 0.9 (0 points)
* -0.4 (0 points)
* 0.9 (0 points)
* 0.85 (0 points)

***(10 points) | \_\_\_***

Correct

Incorrect

**Question 2 of 10**

Problem 2.

* a) In this section select the average time a customer spends in a waiting line: (0 points)
* 48 (0 points)
* 60 (0 points)
* 0.0593 (10 points)
* 0.5385 (0 points)
* 0.6 (0 points)
* 0.0593 (0 points)
* 0.6593 (0 points)
* b) What is the probability that there are 5 customers in the system? (0 points)
* 1 (0 points)
* 0.0026 (10 points)
* 0.0137 (0 points)
* 0.1385 (0 points)
* 0.1905 (0 points)
* 0.9524 (0 points)
* 1 (0 points)
* None (0 points)

***(10 points) | \_\_\_***

Correct

Incorrect

**Question 3 of 10**

Problem 3.

* What is the probability that six customers will arrive in one hour? (0 points)
* 0.0889 (0 points)
* 0.1353 (0 points)
* 0.0120 (10 points)
* 0.0887 (0 points)
* 0.1353 (0 points)

***(10 points) | \_\_\_***

Correct

Incorrect

**Question 4 of 10**

Problem 4.

* What is the probability that a customer will require more than 10 minutes of service? (0 points)
* 1 (0 points)
* 0 (0 points)
* 0.1667 (0 points)
* 0.3941 (0 points)
* 0.6059 (10 points)
* -0.5010 (0 points)

***(10 points) | \_\_\_***

Correct

Incorrect

**Question 5 of 10**

Problem 5.

* a) In this section, select the mean of the weekly car sales over the period of 18 weeks: (0 points)
* 54.8745 (0 points)
* 5.4231 (0 points)
* 27.2341 (0 points)
* 2.6667 (10 points)
* 0 (0 points)
* $40,000 (0 points)
* 1 (0 points)
* b) What is the projected revenue for the week 17? (0 points)
* $40,000 (0 points)
* $60,000 (0 points)
* $80,000 (0 points)
* $100.000 (0 points)
* $90,000 (0 points)
* $120,000 (10 points)
* $140,000 (0 points)

***(10 points) | \_\_\_***

Correct

Incorrect

**Question 6 of 10**

Problem 6.

* What is the extrapolated value for the 27th week? (0 points)
* 28.4116 (10 points)
* 28.1253 (0 points)
* 27.9675 (0 points)
* 26.3427 (0 points)
* 17.9987 (0 points)
* 0 (0 points)
* 1 (0 points)

***(10 points) | \_\_\_***

Correct

Incorrect

**Question 7 of 10**

Problem 7.

* a) In this section, select the forecasted sales of a new restaurant in a location with population of 25,000. (Round up) (0 points)
* $26,000 (0 points)
* $121,000 (0 points)
* $183,059 (10 points)
* $61 (0 points)
* $221,764 (0 points)
* $6.1356 (0 points)
* $1 (0 points)
* b) Select the value of the Coefficient of Determination: (0 points)
* 0 (0 points)
* 1 (0 points)
* 0.8624 (10 points)
* 0.9286 (0 points)
* 0.8349 (0 points)
* 13.1152 (0 points)
* 1 (0 points)
* c) Is the model (the regression line): (0 points)
* Positive (10 points)
* Negative (0 points)
* 0 (0 points)
* c) The predictor is (select from the options shown below): (0 points)
* weak predictor (0 points)
* somewhat weak predictor (0 points)
* somewhat strong predictor (0 points)
* strong predictor (0 points)
* very strong predictor (10 points)

***(10 points) | \_\_\_***

Correct

Incorrect

**Question 8 of 10**

Problem 8.

* Select the predicted market share of the store D at the end of the second period: (0 points)
* 0.3300 (0 points)
* 0.1470 (0 points)
* 0 (0 points)
* 0.2810 (0 points)
* 0.4141 (0 points)
* 0.2245 (0 points)
* 0.1765 (10 points)
* 0.1850 (0 points)
* 0.2424 (0 points)

***(10 points) | \_\_\_***

Correct

Incorrect

**Question 9 of 10**

Problem 9.

* a) In this section select the Correlation Coefficient between the Weight and the Sales (absolute value): (0 points)
* 0.2454 (0 points)
* 0.4398 (0 points)
* -0.3224 (10 points)
* 0.3507 (0 points)
* 0.8501 (0 points)
* 0.1828 (0 points)
* 1 (0 points)
* b) What is the direction of this Correlation? (0 points)
* Positive (0 points)
* Negative (10 points)
* 0 (0 points)
* c) What is the strength of this correlation? (0 points)
* very strong (0 points)
* somewhat strong (0 points)
* somewhat weak (10 points)
* weak (0 points)

***(10 points) | \_\_\_***

Correct

Incorrect

**Question 10 of 10**

Problem 10.

* What are the unit sales that correspond to the exponentially smoothed value of 21.3565 (0 points)
* 17 (0 points)
* 19 (0 points)
* 20 (0 points)
* 21 (0 points)
* 23 (0 points)
* 16 (0 points)
* 22 (0 points)
* 24 (10 points)
* 27 (0 points)
* 28 (0 points)
* 25 (0 points)
* 26 (0 points)

***(10 points) | \_\_\_***

Correct

Incorrect

You have reached the end of this answer sheet. Click "next" when you are ready to submit your answers to be graded.