| Oline Homework Package <br> Created by : Elsit and Satya Mandal |  |  |  |
| :---: | :---: | :---: | :---: |
| Course Id :Math 105 | Topics in Mathematics | Semester : Summer2017 |  |
| Instructor :Satya Mandal <br> Line No : 84895 |  |  |  |
| Homework No: 9 | Total Points :50 | Due Date:(YYYY-MM-DD) <br> $2017-07-27$ |  |

Question- Suppose E and F are two events. It is given that $\mathrm{P}(\mathrm{E})=.22, \mathrm{P}(\mathrm{F})=.65$, and $\mathrm{P}(\mathrm{E}$ and F$)=.13$. 1 Determine the probability that either E or F occur.

| Answer <br> Question-1 | This is a Numerical-Answer Type Question |
| :--- | :--- | :--- |
| P(E or F) $=$ |  |
| Points | 5.00 |

Question- Suppose E and F are two events. It is given that $\mathrm{P}(\mathrm{E})=.33, \mathrm{P}(\mathrm{F})=.54$, and $\mathrm{P}(\mathrm{E}$ or F$)=.65$. 2 Determine the probability that both E and F occur.

| Answer <br> Question-2 | This is a Numerical-Answer Type Question |
| :--- | :--- | :--- |
| P(E and F) $=$ |  |
| Points | 5.00 |


| Question- | The proportion of students who own a vehicle is 0.55 , and the proprtion of students who live in a <br> dorm is 0.41 . If the proprtion of students who either own a vehicle or live in a dorm is 0.83, find <br> the proprtion of students who live in a dorm and own a vehicle. |
| :--- | :--- |


| Answer <br> Question-3 | This is a Numerical-Answer Type Question |
| :--- | :--- | :--- |
| Probability = |  |
| Points | 5.00 |

Question- Probability that a student will get an A in Math 101 is .22 and the probability that a students will get an A in Engl 101 is .33 . Also, probability that the student will get an A in both Math 101 and Engl 101 is .11. What is the probability that a student will get an A in at least one of them?

| Answer <br> Question-4 | This is a Numerical-Answer Type Question |
| :--- | :--- | :--- |
| Probability $=$ |  |
|  | 5.00 |

Question- Probability that the birth weight of a baby will exceed 8 lbs is .27 . The probability that the 5 length, at birth, will exceed 20 inches is .33 . The probability that a baby will either be above 8 lbs or exceed 22 inches, at birth, is 39 . What is the probability that the baby will be both above 8 lbs and exceed 20 inches?

| Answer <br> Question-5 | This is a Numerical-Answer Type Question |
| :--- | :--- | :--- |
| Answer = |  |
| Points | 5.00 |

Question-
A couple moves back to their home town. The probability that the man will find a job within a month is .53 . The probability that the woman will find a job within a month is .64 . The probability that both will find a job within a month is .28 . What is the probability that at least one on them will find a job within a month?

| Answer <br> Question-6 | This is a Numerical-Answer Type Question |
| :--- | :--- |
| P(the man or the woman will find a job) $=$ |  |
| Points | 5.00 |

Question- You are a campaign worker for a candidate and visit a couple. The probability that the man will vote for your candidate is .43 and the probability that the woman will vote for your candidate is .53. The probability that both will vote for your candidate is .23 . What is the probability that at least one on them will vote for your candidate?

| Answer <br> Question-7 | This is a Numerical-Answer Type Question |
| :--- | :--- |
| P(the man or the woman will vote) $=$ |  |
| Points | 5.00 |

Question- You went for a hunting trip. Probability that you will find a dear is .57 and the probability that

| Answer <br> Question-8 | This is a Numerical-Answer Type Question |
| :--- | :--- |
| P(dear and turkey $=$ |  |
| Points | 5.00 |

Question- The probability that you will go for a study abroad program next summer is .36 and the 9 probability that you will vacation in Europe in next summer is .33 . The probability that next summer you will do both is .13. What is the probability that next summer either you will go for study abroad or vacation in Europe?

| Answer <br> Question-9 | This is a Numerical-Answer Type Question |
| :--- | :--- | :--- |
| P(Study abroad or Vacation in Europe) $=$ |  |
| Points | 5.00 |

Question- The probability that a student will find a (desirable) job before graduation is .47 and the 10 probability that a student will get married before graduation in .38 . The probability that a student will get a job and get married before graduation is .17 . What is the probability that a student will either find a job or get married before graduation?

| Answer <br> Question-10 | This is a Numerical-Answer Type Question |
| :--- | :--- |
| Points | P(find a jon or ger married $=$ |

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