Time Remaining:

1. (TCO 4) How many ways can an EMT union committee of 5 be chosen from 25 EMTs? (Points: 5)

100

125

15,504

53,130

2. (TCO 4) Which of the following cannot be a probability? (Points: 5)

0

-49

0.001

14%

Type: ES

3. (TCO 4) List the sample space of rolling a 6 sided die. (Points: 5)

{1, 3, 5}

{1, 2, 4, 6}

{1, 2, 3, 4, 5, 6}

{2, 3, 4, 5, 6}

4. (TCO 4) What is the probability of choosing a face card (jack, queen, or king) on the second draw if the first draw was a king (without replacement)? (Points: 5)

0.231

0.784

0.216

0.769

5. (TCO 4) A respiratory class has 33 women and 18 men. If a student is chosen randomly to be the team leader, what is the probability the student is a woman? (Points: 5)

0.33

0.353

0.67

0.647

6. (TCO 4) Compute the following: 3! ÷ (0! \* 3!) (Points: 5)

6

1

12

0

7. (TCO 5) Decide whether the experiment is a binomial, Poisson, or neither based on the information given. You observe the gender of the next 950 babies born at a local hospital. The random variable represents the number of girls. Historically, 49.8% of the babies born are girls. (Points: 5)

binomial

Poisson

neither

8. (TCO 5) Given a Poisson distribution with mean = 4. Find P(X > 3). (Points: 5)

0.195

0.238

0.433

0.567

9. (TCO 5) Given the random variable X = {4, 5} with P(4) = 0.4 and P(5) = 0.6. Find E(X). (Points: 5)

1.6

4.6

2.4

3.0

10. (TCO 5) If X = {10, 20, 30, 40} and P(10) = 0.30, P(20) = 0.30, P(30) = 0.30, and P(40) = 0.30, can distribution of the random variable X be considered a probability distribution? (Points: 5)

yes

no

11. (TCO 5) If X = {2, 6, 10, 14} and P(2) = 0.2, P(6) = 0.3, P(10) = 0.4, and P(14) = 0.1, can distribution of the random variable X be considered a probability distribution? (Points: 5)

yes

no

12. (TCO 5) The weight of a box of Cheerios represents what kind of distribution? (Points: 5)

discrete

continuous

13. (TCO 5) Your baby’s weight represents what kind of distribution? (Points: 5)

discrete

continuous

14. (TCO 5) The number of patients donating blood in a day represents what kind of distribution? (Points: 5)

discrete

continuous

15.

(TCO 5) We have a binomial experiment with p = 0.4 and n = 2.

(1) Set up the probability distribution by showing all x values and their associated probabilities.

(2) Compute the mean, variance, and standard deviation.

Time Remaining: 



|  |
| --- |
| **1.** (TCO 4) What is the probability that the student is a sophomore given he doesn�t carry a credit card?  classes1.jpg(Points: 5)    **2.** (TCO 4) Some students were asked if they carry a credit card. Here are the responses.  What is the probability that the student was a freshman? (Points: 5) classes2.jpg |

**3.** (TCO 4) What is the probability that the student is a freshman and doesn�t carry a credit card?   
(Points: 5)

