Practice9

- 1) If P(A) = 0.25, P(B) = 0.51, and P(A or B) = 0.76, are A and B mutually exclusive? B) No
- 1) _____

A) Yes

- 2) If P(A) = 0.37, P(B) = 0.7, and P(A or B) = 0.74, are A and B mutually exclusive? B) Yes A) No

- 3) In a fish tank, there are 28 goldfish, 3 angelfish, and 17 guppies. If a fish is selected at random, find the probability that it is an angelfish or a guppy.

A) $\frac{7}{12}$

- D) $\frac{5}{12}$
- 4) If a single card is drawn from an ordinary deck of cards, what is the probability of drawing a jack, queen, king, or ace?

A) $\frac{17}{52}$

- B) $\frac{9}{26}$
- c) $\frac{4}{13}$
- D) $\frac{5}{13}$
- 5) A single card is drawn from a deck. Find the probability of selecting a heart or a 8.

A) $\frac{17}{52}$

- C) $\frac{1}{4}$

- D) $\frac{4}{13}$
- 6) Two dice are rolled. Find the probability of getting doubles or a sum of 2.

A) $\frac{1}{4}$

- C) $\frac{7}{36}$
- 7) In a recent semester at a local university, 520 students enrolled in both General Chemistry and Calculus I. Of these students, 70 received an A in general chemistry, 81 received an A in calculus, and 34 received an A in both general chemistry and calculus.
- 7)

Find the probability that a randomly chosen student received an A in general chemistry or calculus or both.

- A) 0.356
- B) 0.29
- c) 0.775
- D) 0.225

8) The frequency distribution shows the number of medical tests conducted on 30 randomly selected emergency room patients.

| Number of tests performed | Number of patients |
|---------------------------|--------------------|
| 0 | 11 |
| 1 | 9 |
| 2 | 6 |
| 3 | 3 |
| 4 or more | 1 |

If a patient is selected at random, find these probabilities:

- a. The patient had exactly 3 tests done.
- b. The patient had at most 2 tests done.
- c. The patient has 1 or 2 tests done.
- d. The patient had fewer than 3 tests done.
- e. The patient had at least 3 tests done.
- 9) An apartment building has the following distribution of apartments:

9)

| | 1 bedroom | 2 bedroom | 3 bedroom |
|-----------|-----------|-----------|-----------|
| 1st floor | 3 | 0 | 1 |
| 2nd floor | 1 | 3 | 2 |
| 3rd floor | 1 | 4 | 1 |

If an apartment is selected at random, what is the probability that it is on the 2nd floor or has 2 bedrooms?

A) $\frac{5}{8}$

B) $\frac{13}{16}$

C) $\frac{7}{10}$

D) $\frac{3}{5}$

Answer Key

Testname: PRACTICE9

- 1) A 2) A 3) D
- 4) C 5) D 6) D 7) D

- 8) $a. \frac{1}{10}$; $b. \frac{13}{15}$; $c. \frac{1}{2}$; $d. \frac{13}{15}$; $e. \frac{2}{15}$
- 9) A