

Chapter 9 Practice Test

Questions 1-4 refer to the following information.

	Economics	History	Music
Male	24	20	19
Female	18	22	17

The table above shows the distribution of a group of 120 college students by gender and major.

1

If one student is randomly selected from the group, what is the probability that the student is a History major?

- A) $\frac{36}{120}$
- B) $\frac{40}{120}$
- C) $\frac{42}{120}$
- D) $\frac{46}{120}$

2

If a male student is selected at random, which of the following is closest to the probability that he is a Music major?

- A) 0.270
- B) 0.302
- C) 0.317
- D) 0.381

3

If one student is randomly selected from the group what is the probability that the student is a male Economics major?

- A) $\frac{24}{120}$
- B) $\frac{42}{120}$
- C) $\frac{24}{42}$
- D) $\frac{24}{63}$

4

If a Music major is selected at random, which of the following is closest to the probability that the student is a female?

- A) 0.298
- B) 0.315
- C) 0.386
- D) 0.472

Questions 5 and 6 refer to the following information.

	Under 30	30 or older	Total
Male	3		12
Female			20
Total	8	24	32

The incomplete table above shows the distribution of age and gender for 32 people who entered a tennis tournament.

5

If a tennis player is chosen at random, what is the probability that the player will be either a male under age 30 or a female aged 30 or older?

- A) $\frac{15}{32}$
 B) $\frac{18}{32}$
 C) $\frac{20}{32}$
 D) $\frac{24}{32}$

6

If a person is selected at random from the 30 or older player group, what is the probability that the person is a female?

- A) $\frac{5}{20}$
 B) $\frac{15}{20}$
 C) $\frac{9}{24}$
 D) $\frac{15}{24}$

Questions 7 and 8 refer to the following information.

Number of Visits to Movie Theaters by Students

	None	1 to 2	3 or more
Juniors	x	$2x$	$\frac{1}{2}x$
Seniors	y	$\frac{5}{2}y$	$\frac{1}{2}y$

The table above summarizes the number of visits to movie theaters by 168 juniors and 152 seniors during summer vacation.

7

If a student is selected at random from those who visited movie theaters at least once, what is the probability that the student is a junior?

- A) $\frac{16}{39}$
 B) $\frac{18}{39}$
 C) $\frac{20}{39}$
 D) $\frac{22}{39}$

8

If a student is selected at random, which of the following is closest to the probability that the student is a senior and visited movie theaters 1 or 2 times?

- A) 0.156
 B) 0.205
 C) 0.297
 D) 0.324