

Name _____

Two-Way Frequency Table PRACTICE

1. Students were asked about a proposal to increase funding for the football program.

	For (F)	Against (A)	No Opinion (N)	Total
Boys (B)	40	5	10	55
Girls (G)	10	30	5	45
Total	50	35	15	100

Find the probability that a randomly selected student:

- A. is a girl
- B. is against the proposal
- C. is a boy and for the proposal
- D. has no opinion and is a girl
- E. is against the proposal or is a boy
- F. is a girl or has no opinion
- G. is for the proposal given that the student selected is a boy
- H. is for the proposal given that the student selected is a girl
- I. is a boy given that the student selected has no opinion

2. 100 people were asked if they bought a coat and/or a shirt at a clothing store that day.

	Bought a Coat	No Coat
Bought a Shirt	3	12
No Shirt	17	68

Find the probability that a randomly selected student:

- A. bought a shirt
- B. did not buy a coat
- C. bought a coat and a shirt
- D. didn't buy a coat and didn't buy a shirt
- E. bought a shirt or a coat
- F. bought a shirt or did not buy a coat
- G. bought a shirt given that the person selected bought a coat
- H. did not buy a coat given that the person selected did not buy a shirt
- I. bought a coat given that the person selected bought a shirt

3. A group of students were asked if they studied for a biology quiz.

	Score \geq 90	Score $<$ 90
Studied	12	3
Did Not Study	1	14

Find the probability that a randomly selected student:

A. studied

F. studied or scored a 90 or higher

B. scored less than a 90

G. studied and scored a 90 or higher

C. studied and scored less than a 90

H. scored less than a 90 given that the student selected did not study

D. did not study and scored less than a 90

I. did not study given that the student selected scored less than a 90

E. studied given that the student selected scored a 90 or higher

4. A group of students working on a school play were asked if they are performers or stage crew members.

	Performer	Stage Crew
Boys	14	18
Girls	21	7

Find the probability that a randomly selected student:

A. is a boy

F. is a girl or a stage crew member

B. is a boy or a performer

G. is a girl given that the student selected is a performer

C. is a boy and a performer

H. is a stage crew member given that the student selected is a boy

D. is a stage crew member

I. is a boy or a stage crew member

E. is a stage crew member and a girl

5. The two way frequency table shows the results of a survey of 11th and 12th grade students that were asked if they do community service.

	Does Community Service (C)	No Community Service (N)	Total
11th Grade (E)	24	12	36
12th Grade (T)	16	8	24
Total	40	20	60

Find the probability that a randomly selected student:

A. is in the 11th grade

F. is in the 12th grade given that the student selected does community service

B. is in the 11th grade and doesn't do community service

G. is in the 11th grade or does not do community service

C. is in the 12th grade and does community service

H. is in the 11th grade given that the student selected does not do community service

D. is in the 12th grade or does community service

I. does not do community service or is in the 12th grade

E. does community service given that the student selected is in the 12th grade

6. 110 9th-12th graders were asked if they preferred a dog or a cat.

	Dogs	Cats	Total
9th Grade	20	5	25
10th Grade	16	4	20
11th Grade	22	6	28
12th Grade	30	7	37
<i>Total</i>	88	22	110

Find the probability that a randomly selected student:

A. is in 10th grade

F. is in the 10th grade or prefers cats

B. is in 9th grade and prefers dogs

G. prefers cats and is in the 11th grade

C. is in 12th grade or prefers dogs

H. prefers cats given that the person selected is in the 10th grade

D. prefers dogs given that the person selected in the 12th grade

I. is in the 11th grade and prefers cats

E. is in the 9th grade given that the person selected prefers cats

