Algebra 2
Chapter 11 - Probability
11.4 – Two Way Frequency Tables

Name: KEY

Date: _____ Per: _____

A Two-Way Frequency Table shows: SHOWS DATA THAT PERTAIN TO DIFFERENT CATEGORIES (SIMILAR TO A VENN DIAGRAM)

Use the following two-way frequency table to answer the following questions:

	0 Times Per Week	1-2 Times Per Week	3+ Times Per Week	Total
Male	62	37	55	154
Female	73	89	33	195
Total	135	126	88	349

Find the probability that a person who is randomly selected...

a.) is a male?

$\frac{154}{349}$

b.) is a female?

$\frac{195}{349}$

c.) exercises 1-2 times per week?

$\frac{126}{349}$

d.) exercises 3+ times per week?

$\frac{88}{349}$

e.) exercises 0-2 times per week?

$\frac{135 + 126}{349}$

$\frac{261}{349}$

f.) is a male that exercises 0 times/week?

$\frac{62}{349}$

g.) What is the probability that a randomly selected female exercises 3+ times per week?

$\frac{33}{195}$

h.) What is the probability that a randomly selected female exercises 1-2 times per week?

$\frac{89}{195}$

i.) What is the probability that a randomly selected person that exercises 0 times per week is a male?

$\frac{62}{135}$

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Use the following two-way frequency table to answer the following questions:

	Democrat	Republican	Independent	Total
Support the Bill	48	28	24	100
Against the Bill	25	59	33	117
Undecided	52	12	51	115
Total	125	99	108	332

Find the probability that a person who is randomly selected...

a.) is a Democrat?

$\frac{125}{332}$

b.) is a Republican?

$\frac{99}{332}$

c.) is an Independent?

$\frac{108}{332}$

d.) supports the bill?

$\frac{100}{332}$

e.) is against the bill?

$\frac{117}{332}$

f.) is undecided?

$\frac{115}{332}$

g.) What is the probability that a randomly selected person is a democrat who supports the bill?

$\frac{48}{125}$

h.) What is the probability that a randomly selected Republican is against the bill?

$\frac{59}{99}$

i.) What is the probability that a randomly selected person that is undecided is a Democrat?

$\frac{52}{115}$

j.) What is the probability that a randomly selected person that supports the bill is an independent?

$\frac{24}{100}$

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Use the following two-way frequency table to answer the following questions:

The chart below displays the vacation choices of 60 British students:

	France	Germany	Spain	Total
Male	2	23	9	34
Female	15	2	9	26
Total	17	25	18	60

Find the probability that a person who is randomly selected...

a.) is a male?

$\frac{34}{60}$

b.) is a female?

$\frac{26}{60}$

c.) visited France?

$\frac{17}{60}$

d.) Visited Germany?

$\frac{25}{60}$

e.) Visited France OR Germany?

$\frac{17+25}{60}$

$\frac{42}{60}$

f.) is a female that visited France?

$\frac{15}{17}$

g.) What is the probability that a randomly selected female visited Spain?

$\frac{9}{26}$

h.) What is the probability that a randomly selected male visited France?

$\frac{2}{34}$

i.) What is the probability that a randomly selected person that visited Germany is a male?

$\frac{23}{25}$

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Use the following two-way frequency table to answer the following questions:

The chart below displays the type of music 100 adults prefer to listen to:

	Jazz	Rock	Classical	Folk	Total
Male	12	17	19	4	52
Female	9	23	9	7	48
Total	21	40	28	11	100

Find the probability that a person who is randomly selected...

a.) is a male?

$\frac{52}{100}$

b.) is a female?

$\frac{48}{100}$

c.) Likes Folk?

$\frac{11}{100}$

d.) Likes Jazz?

$\frac{21}{100}$

e.) Likes Rock?

$\frac{40}{100}$

f.) Likes Classical?

$\frac{28}{100}$

g.) What is the probability that a randomly selected female likes Rock?

$\frac{23}{48}$

h.) What is the probability that a randomly selected male likes Folk?

$\frac{4}{52}$

i.) What is the probability that a randomly selected person that likes jazz is a female?

$\frac{9}{21}$

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