

**Corrective Assignment**

Fill in the missing cells of the two way frequency tables.

1.

		Own an iPhone		
		Yes	No	Total
People	Teachers	20		
	Students		60	
	Total	150		240

2.

		Political Party			Total
		Rep	Dem	Ind	
Generation	Baby Boomers	50	45		103
	Gen X		118		255
	Millennials	60		82	
	Total		218	112	

3.

		Favorite Day of the Week					Total
		Wed	Thur	Fri	Sat	Sun	
Gender	Boys		18		48	16	107
	Girls	6		34	40		
	Total		38	55		48	

Convert the two way frequency tables from above into relative frequency tables.

4. convert #1

		Own an iPhone		
		Yes	No	Total
People	Teachers			
	Students			
	Total			

5. convert #2

		Political Party			Total
		Rep	Dem	Ind	
Generation	Baby Boomers				
	Gen X				
	Millennials				
	Total				

6. convert #3

		Favorite Day of the Week					Total
		Wed	Thur	Fri	Sat	Sun	
Gender	Boys						
	Girls						
	Total						

Use the two way frequency table and relative frequency table to answer the following.

Two Way Frequency Table

		Study for Test			Total
		Yes	No	Maybe	
Type of Student	A Students	28	3	1	32
	B Students	22	8	6	36
	C Students	14	12	10	36
	Total	64	23	17	104

Relative Frequency Table

		Study for Test			Total
		Yes	No	Maybe	
Type of Students	A Students	.269	.028	.009	.307
	B Students	.211	.076	.057	.346
	C Students	.134	.115	.096	.346
	Total	.615	.221	.163	1

7. What percent of students will study for the test?
8. What percent of the students are B students that will study?
9. How many B students surveyed said "Maybe" ?
10. How man C students were surveyed?

11. Given a student is a B student, what percent said "No" to studying?
12. If you randomly selected a student who said "Yes" to studying, what percent are B students?
13. If you randomly selected a student that was a C student, what percent said "Maybe" to studying?

### Answers to Corrective Assignment 5.1

<p>1.</p> <table border="1"> <thead> <tr> <th colspan="2" rowspan="2"></th> <th colspan="3">Own an iPhone</th> <th rowspan="2">Total</th> </tr> <tr> <th>Yes</th> <th>No</th> <th>Total</th> </tr> </thead> <tbody> <tr> <th rowspan="3">People</th> <th>Teachers</th> <td>20</td> <td>30</td> <td>50</td> </tr> <tr> <th>Students</th> <td>130</td> <td>60</td> <td>190</td> </tr> <tr> <th>Total</th> <td>150</td> <td>90</td> <td>240</td> </tr> </tbody> </table>			Own an iPhone			Total	Yes	No	Total	People	Teachers	20	30	50	Students	130	60	190	Total	150	90	240	<p>2.</p> <table border="1"> <thead> <tr> <th rowspan="2">Generation</th> <th colspan="3">Political Party</th> <th rowspan="2">Total</th> </tr> <tr> <th>Rep</th> <th>Dem</th> <th>Ind</th> </tr> </thead> <tbody> <tr> <th>Baby Boomers</th> <td>50</td> <td>45</td> <td>8</td> <td>103</td> </tr> <tr> <th>Gen X</th> <td>115</td> <td>118</td> <td>22</td> <td>255</td> </tr> <tr> <th>Millennials</th> <td>60</td> <td>55</td> <td>82</td> <td>197</td> </tr> <tr> <th>Total</th> <td>225</td> <td>218</td> <td>112</td> <td>555</td> </tr> </tbody> </table>	Generation	Political Party			Total	Rep	Dem	Ind	Baby Boomers	50	45	8	103	Gen X	115	118	22	255	Millennials	60	55	82	197	Total	225	218	112	555													
			Own an iPhone				Total																																																									
		Yes	No	Total																																																												
People	Teachers	20	30	50																																																												
	Students	130	60	190																																																												
	Total	150	90	240																																																												
Generation	Political Party			Total																																																												
	Rep	Dem	Ind																																																													
Baby Boomers	50	45	8	103																																																												
Gen X	115	118	22	255																																																												
Millennials	60	55	82	197																																																												
Total	225	218	112	555																																																												
<p>3.</p> <table border="1"> <thead> <tr> <th rowspan="2"></th> <th>Wed</th> <th>Thur</th> <th>Fri</th> <th>Sat</th> <th>Sun</th> <th>Total</th> </tr> </thead> <tbody> <tr> <th>Boys</th> <td>4</td> <td>18</td> <td>21</td> <td>48</td> <td>16</td> <td>107</td> </tr> <tr> <th>Girls</th> <td>6</td> <td>20</td> <td>34</td> <td>40</td> <td>32</td> <td>132</td> </tr> <tr> <th>Total</th> <td>10</td> <td>38</td> <td>55</td> <td>88</td> <td>48</td> <td>239</td> </tr> </tbody> </table>		Wed	Thur	Fri	Sat	Sun	Total	Boys	4	18	21	48	16	107	Girls	6	20	34	40	32	132	Total	10	38	55	88	48	239	<p>4.</p> <table border="1"> <thead> <tr> <th colspan="2" rowspan="2"></th> <th colspan="3">Own an iPhone</th> </tr> <tr> <th>Yes</th> <th>No</th> <th>Total</th> </tr> </thead> <tbody> <tr> <th rowspan="3">People</th> <th>Teachers</th> <td>.083</td> <td>.125</td> <td>.208</td> </tr> <tr> <th>Students</th> <td>.541</td> <td>.25</td> <td>.791</td> </tr> <tr> <th>Total</th> <td>.625</td> <td>.375</td> <td>1</td> </tr> </tbody> </table>			Own an iPhone			Yes	No	Total	People	Teachers	.083	.125	.208	Students	.541	.25	.791	Total	.625	.375	1														
		Wed	Thur	Fri	Sat	Sun	Total																																																									
	Boys	4	18	21	48	16	107																																																									
Girls	6	20	34	40	32	132																																																										
Total	10	38	55	88	48	239																																																										
		Own an iPhone																																																														
		Yes	No	Total																																																												
People	Teachers	.083	.125	.208																																																												
	Students	.541	.25	.791																																																												
	Total	.625	.375	1																																																												
<p>5.</p> <table border="1"> <thead> <tr> <th rowspan="2">Generation</th> <th colspan="3">Political Party</th> <th rowspan="2">Total</th> </tr> <tr> <th>Rep</th> <th>Dem</th> <th>Ind</th> </tr> </thead> <tbody> <tr> <th>Baby Boomers</th> <td>.09</td> <td>.081</td> <td>.014</td> <td>.185</td> </tr> <tr> <th>Gen X</th> <td>.207</td> <td>.212</td> <td>.039</td> <td>.459</td> </tr> <tr> <th>Millennials</th> <td>.108</td> <td>.099</td> <td>.147</td> <td>.354</td> </tr> <tr> <th>Total</th> <td>.405</td> <td>.392</td> <td>.201</td> <td>1</td> </tr> </tbody> </table>	Generation	Political Party			Total	Rep	Dem	Ind	Baby Boomers	.09	.081	.014	.185	Gen X	.207	.212	.039	.459	Millennials	.108	.099	.147	.354	Total	.405	.392	.201	1	<p>6.</p> <table border="1"> <thead> <tr> <th colspan="2" rowspan="2"></th> <th colspan="5">Favorite Day of the Week</th> <th rowspan="2">Total</th> </tr> <tr> <th>Wed</th> <th>Thur</th> <th>Fri</th> <th>Sat</th> <th>Sun</th> </tr> </thead> <tbody> <tr> <th rowspan="3">Gender</th> <th>Boys</th> <td>.016</td> <td>.075</td> <td>.087</td> <td>.2</td> <td>.066</td> <td>.447</td> </tr> <tr> <th>Girls</th> <td>.025</td> <td>.083</td> <td>.142</td> <td>.167</td> <td>.133</td> <td>.552</td> </tr> <tr> <th>Total</th> <td>.041</td> <td>.158</td> <td>.23</td> <td>.368</td> <td>.2</td> <td>1</td> </tr> </tbody> </table>			Favorite Day of the Week					Total	Wed	Thur	Fri	Sat	Sun	Gender	Boys	.016	.075	.087	.2	.066	.447	Girls	.025	.083	.142	.167	.133	.552	Total	.041	.158	.23	.368	.2	1
Generation		Political Party				Total																																																										
	Rep	Dem	Ind																																																													
Baby Boomers	.09	.081	.014	.185																																																												
Gen X	.207	.212	.039	.459																																																												
Millennials	.108	.099	.147	.354																																																												
Total	.405	.392	.201	1																																																												
		Favorite Day of the Week					Total																																																									
		Wed	Thur	Fri	Sat	Sun																																																										
Gender	Boys	.016	.075	.087	.2	.066	.447																																																									
	Girls	.025	.083	.142	.167	.133	.552																																																									
	Total	.041	.158	.23	.368	.2	1																																																									
<p>7. 61.5%</p>	<p>8. 21.1%</p>	<p>9. 6 students</p>	<p>10. 36 students</p>																																																													
<p>11. <math>\frac{8}{36} = 22.2\%</math></p>	<p>12. <math>\frac{22}{64} = 34.3\%</math></p>	<p>13. <math>\frac{10}{36} = 27.7\%</math></p>																																																														