

Content Standard	MAFS.8.SP Statistics and Probability MAFS.8.SP.1 Investigate patterns of association in bivariate data. MAFS.8.SP.1.4 Understand that patterns of association can also be seen in bivariate categorical data by displaying frequencies and relative frequencies in a two-way table. Construct and interpret a two-way table summarizing data on two categorical variables collected from the same subjects. Use relative frequencies calculated for rows or columns to describe possible association between the two variables. <i>For example, collect data from students in your class on whether or not they have a curfew on school nights and whether or not they have assigned chores at home. Is there evidence that those who have a curfew also tend to have chores?</i>																	
Assessment Limits	Numbers in items must be rational numbers. Data given should include the grand total of the survey. Tables must not include more than two columns (plus category and total) and two rows (plus category and total).																	
Calculator	Yes																	
Item Types	Equation Editor Multiple Choice Multiselect Table Item																	
Context	Required																	
Sample Item		Item Type																
Two hundred sixty students were surveyed on whether they prefer apple juice or orange juice. A table of relative frequencies is shown. <table><tr><td></td><td>Apple juice</td><td>Orange juice</td><td>Total</td></tr><tr><td>Boys</td><td></td><td>0.20</td><td></td></tr><tr><td>Girls</td><td></td><td></td><td>0.75</td></tr><tr><td>Total</td><td>0.45</td><td>0.55</td><td>1.00</td></tr></table> How many more girls prefer apple juice than boys?			Apple juice	Orange juice	Total	Boys		0.20		Girls			0.75	Total	0.45	0.55	1.00	Equation Editor
	Apple juice	Orange juice	Total															
Boys		0.20																
Girls			0.75															
Total	0.45	0.55	1.00															

Sample Item			Item Type												
			Table Item												
Five hundred students were asked whether they prefer apple juice or orange juice. The table shown displays the results.															
	Apple Juice	Orange Juice	Total												
Boys	30	100													
Girls	210	160													
Total															
How many more girls were surveyed than boys?															
<input type="text"/>															
<div><div><div>←</div><div>→</div><div>↶</div><div>↷</div><div>✖</div></div><table><tbody><tr><td>1</td><td>2</td><td>3</td></tr><tr><td>4</td><td>5</td><td>6</td></tr><tr><td>7</td><td>8</td><td>9</td></tr><tr><td>0</td><td>.</td><td>-</td></tr></tbody></table></div>				1	2	3	4	5	6	7	8	9	0	.	-
1	2	3													
4	5	6													
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