

Interpreting Categorical Variables

<p>Statistical Question</p>	<p>What is the proportion of students who do not play an instrument?</p>	<p>How many students neither own a cat nor play an instrument?</p>	<p>Do a greater proportion of students in Rosa's art class who own cats prefer to play an instrument than those who do not own cats?</p>	<p>Is there a difference in cat preference for those who play instruments versus those who don't?</p>	
<p>Visualization</p>					
<p>Numerical Summaries</p>					
<p>Answer</p>					

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Answer Key

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Visualization	<i>Plot B</i>	<i>Plot E Plot G Plot K Plot I</i>	<i>Plot H Plot J</i>	<i>Plot E Plot F Plot L Plot I</i>	
Numerical Summaries	<i>Table 2</i>	<i>Table 1 Table 7</i>	<i>Table 8</i>	<i>Table 4</i>	
Answer	<i>The proportion of students who do not play an instrument is 0.514. A majority of students do not play an instrument.</i>	<i>Nine students neither own a cat nor play and instrument.</i>	<i>No. About 44% of students who own cats play an instruments whereas 53% of students who do not own cats play an instrument.</i>	<i>41% of students who play and instrument own a cat and 50% of students who do not play an instrument own a cat. It seems that students in Rosa's class who do not play an instrument prefer cats compared to those students that play and instrument.</i>	