

# MathFLIX CHALLENGE

## Mathematical Modeling: Girls & Boys

*Read to Succeed* is an exciting program that encourages students to read for fun. Students who complete six hours of recreational reading earn a free ticket to *Six Flags Great America (GA)*. **Anna, Gabrielle, Ari, Lou, Jamel, Amy, Jack, Lila, Emma, Sam, Pat Terri, Ian and Al** earned free tickets to *Great America*.

*Study the example below to understand the pattern then complete the table.*

Problem	Model	? # of Girls	? # of Boys	Proportion (# of Girls)	Proportion (# of Boys)								
<b>Anna</b> saw 20 children riding on <i>Triple Play</i> . <b>Gabrielle</b> noted $\frac{1}{5}$ of the riders were girls.	<table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>4</td><td>4</td><td>4</td><td>4</td><td>4</td></tr></table>	4	4	4	4	4	4	16	$\frac{1}{5} = \frac{x}{20}$	$\frac{4}{5} = \frac{x}{20}$			
4	4	4	4	4									
<b>Ari</b> noticed 20 students in line for <i>American Eagle</i> . <b>Lou</b> noticed that $\frac{2}{5}$ of them were girls.	<table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>4</td><td>4</td><td>4</td><td>4</td><td>4</td></tr></table>	4	4	4	4	4			— = —	— = —			
4	4	4	4	4									
<b>Jamel</b> told <b>Ari</b> that $\frac{3}{5}$ of the riders on <i>Sky Tower</i> were males. <b>Ari</b> agreed. A sign posted near the ride said the capacity was 60 riders and it was full.				— = —	— = —								
<b>Lou</b> counted 32 seats on <i>Batman</i> . As he and <b>Jamel</b> took the last two seats, he noticed that $\frac{5}{8}$ of the riders were girls.	<table border="1" style="display: inline-table; vertical-align: middle;"><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>												
There are 49 sixth graders at Benjamin Banneker School and $\frac{4}{7}$ are boys.													
There are 42 seventh graders at Carl Gauss School and $\frac{5}{6}$ are boys.													
There are 48 eighth graders at Sophie Germiane School and $\frac{3}{4}$ are girls.													