

Grade 8 - Two-Way Tables and Relative Frequency - Test Answer Key

Common Core 8.SP.A.4 · maths-pdf.fr/en/

Use this answer key to score the two-way tables test out of 20 points. Each solution shows the full work and a scoring guide, so partial credit can be given fairly when a student shows correct steps but makes an arithmetic slip.

Grade 8 · Common Core State Standards: **8.SP.A.4**

Question 1 - Read the table [3 pts]

	Likes math	Does not	Total
Plays chess	24	6	30
No chess	30	40	70
Total	54	46	100

Totals.

a. $24+6=30$

b. $6+40=46$

c. 24

Scoring: 1 point each.

Question 2 - Complete a table [3 pts]

Grade 7: $28+12=40$. Soccer: $28+32=60$. Total: $40+50=90$.

Scoring: 1 point for each total.

Question 3 - Relative frequencies [3 pts]

Chess: $\frac{24}{30}=80\%$. No chess: $\frac{30}{70}\approx 42.9\%$.

Scoring: 1 point for the setup, 1 point for each percent.

Question 4 - Association [2 pts]

Yes. 80% versus 42.9% is a large difference, so chess players are much more likely to like math in this sample.

Scoring: 1 point for yes. 1 point for citing the percents.

Question 5 - Segmented bars [3 pts]

The chess group (80%). The bars are very different, which shows an association.

Scoring: 1 point for the group, 2 points for the explanation.

Question 6 - Build a table [2 pts]

	Sport	No sport	Total
Band	18	12	30
No band	12	8	20
Total	30	20	50

Band and sport.

Scoring: 1 point for the four cells. 1 point for the totals.

Question 7 - Explain [1 pt]

Counts depend on the group size, but percents show the rate for each group.

Scoring: 1 point for a correct explanation.

Question 8 - Cause [3 pts]

Not necessarily. The table shows an association. Other factors, such as distance or schedule, might explain it.

Scoring: 1 point for a clear explanation.

Total
20 points