

BATTING AVERAGE Teaching Guidelines

Subject: Mathematics

Topics: Algebra

Grades: 6 - 12

Knowledge and Skills:

- Can evaluate expressions by substituting values for variables
- Can simplify expressions using correct order of operations
- Can do basic operations on both sides of an equation in such a way as to preserve the equality

Answers

Batter	T	S	K	N	A
Jackie	25	.240	1	3	0.250
Willie	16	.220	0	2	0.196
Roger	13	.310	1	4	0.296
Mickey	32	.190	2	4	0.224
Ila	17	.320	1	3	0.322
Alta	21	.235	0	1	0.224
Carita	17	.280	0	3	0.238
Irma	20	.215	2	4	0.263

Batter	T	S	K	N	A
Jackie	28	0.25	1	4	0.250
Willie	18	0.196	1	3	0.216
Roger	17	0.296	2	3	0.352
Mickey	36	0.224	1	3	0.232
Ila	20	0.322	1	4	0.310
Alta	22	0.224	0	2	0.205
Carita	20	0.238	1	2	0.262
Irma	24	0.263	1	4	0.261

Batting Average

If a batter goes into a game with a seasonal batting average of S after a total of T times at bat, and gets K hits in that game for N times at bat, his new batting average is determined by this equation:

$$A = \frac{T \cdot S + K}{T + N}$$

1. Find the new batting average, A , for each batter in the line-up.

Batter	T	S	K	N	A
Jackie	25	.240	1	3	
Willie	16	.220	0	2	
Roger	13	.310	1	4	
Mickey	32	.190	2	4	
Ila	17	.320	1	3	
Alta	21	.235	0	1	
Carita	17	.280	0	3	
Irma	20	.215	2	4	

2. Find the missing number for each batter.

Batter	T	S	K	N	A
Jackie	28	0.250	?	4	0.250
Willie	18	0.196	1	?	0.216
Roger	?	0.296	2	3	0.352
Mickey	?	0.224	1	3	0.232
Ila	20	?	1	4	0.310
Alta	22	?	0	2	0.205
Carita	20	0.238	?	2	0.262
Irma	24	0.263	1	?	0.261