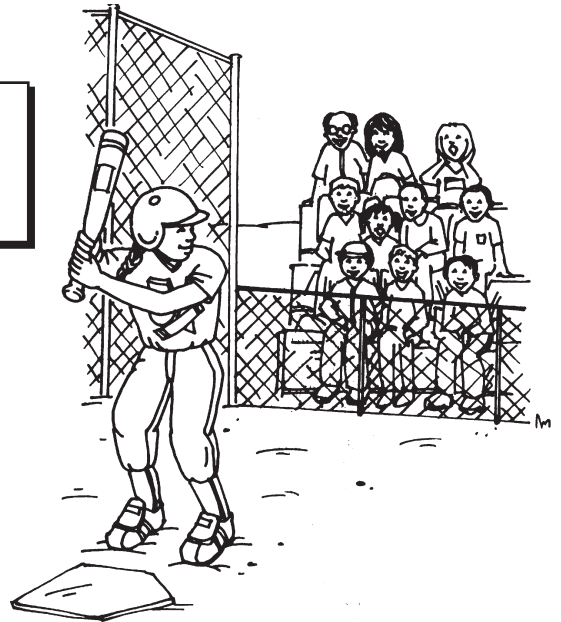


THEY PLAY MEAN!

Remember, to find the average, or mean, of a set of numbers, add all of the numbers and divide the sum by the number of addends.

In baseball, a player's batting average is the number of times the player hit the ball safely divided by the number of times the player tried to hit the ball. The number is represented in thousands for greater accuracy. For example, when a batter has 50 attempts (at-bats) and gets 17 hits, the player's average is $\frac{17}{50}$, or .340.



Answer the questions below.

1. When a batter has 12 hits in 50 at-bats, what is the batter's batting average? _____
2. If a batter has an average of .420 after 50 at-bats, how many balls did the player hit? _____
3. The same batter's average drops to .400 after 25 more at-bats. How many balls out of the 25 did the batter hit? _____
4. How many balls out of the 75 at-bats did the player miss? _____

There are a few players who can hit the ball from both right-handed and left-handed stances. These batters are called switch-hitters. Switch-hitters keep averages for both sides to see from which side they bat better. A batter might hit 30% left-handed and 35% right-handed. The player's total batting average is $\frac{.300 + .350}{2}$, or .325.

5. A switch-hitter is batting .320 right-handed after 50 at-bats. The batter hits 20 out of 50 balls hitting left-handed. What is the total batting average? _____



Extension: Why do teams keep data on the scores of individual players as well as on the team? How do people use this information?

They Play Mean!

Answer Key

1. .240
2. 21
3. 9
4. 45
5. .360

