

Baseball by Numbers

People who watch baseball love to keep score. Most people also like to know how their favorite team or player is doing from one season to the next. If you want to do this properly, you must have the figures (statistics) to show how they have performed and know what the figures mean.

The Toronto Blue Jays play all of their home games at Rogers Centre in Toronto. The Blue Jays won the World Series in 1992 and 1993.

Baseball Worksheet 2

Statistics are a very important part of baseball, many say it is a "game of numbers." There are many statistics in baseball, but on this worksheet we will focus on one of the most important: BATTING AVERAGE.

Batting Average (AVG for short) is a percentage that shows you how successful players are at getting hits. To get a player's batting average, you divide the number of "hits" by the number of times at bat or "at bats." Batting average is shown as a proportion - a 1.000 batting average would mean that a player gets a hit every time they have a turn at bat, for example three hits in three at bats (3 divided by 3) would equal a batting average of 1.000. A batting average of .500 would mean that a player gets one hit in every two at bats (1 divided by 2). In baseball, a batting average above .300 (3 hits in every 10 at bats or 3 divided by 10) is very good. Note: For AVG, always round to the nearest hundredth.

Justin Morneau of the Minnesota Twins



THE HIGHER THE AVG, THE BETTER THE BATTER.

Justin Morneau is the first baseman for the Minnesota Twins and one of the best hitters in baseball. Let's see how his batting average was from 2004 to 2010.

Baseball is America's #1 national pastime

Year	At bat (AB)	Hits (H)	Batting Average (AVG)
2004	280	76	.271
2005	490	117	.239
2006	592	190	.321
2007	590		.271
2008	623	187	
2009		139	.274
2010	296	102	.345

$$\frac{76}{280} = .271$$

Figure 3



Exercise 1

In the 2006 season, Justin got 190 hits in 592 at bats. So his batting average was .321 (190 divided by 592).

(A) How do you write .321 as a percentage?

CIRCLE ANSWER

- a) 3.21% b) 32.1% c) 321%

A B C

Now use Figure 3 to help you answer the 3 questions on the next page.

The last MLB player to have more than a .400 batting average was Ted Williams who batted .406 in 1941

Exercise 1 (cont.)

(b) In 2008, Justin had 623 at bats and 187 hits. What was his batting average for the year? (Round to the nearest hundredth)

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(c) In 2007, he had 590 at bats and ended up with a batting average of .271. How many hits did he have?

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(d) Justin finished 2009 with a batting average of .274 and 139 hits. How many at bats did he have?

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VERNON WELLS - TORONTO BLUE JAYS			
Year	At Bat (AB)	Hits (H)	Batting Average (AVG)
2004	536	146	.272
2005	620	167	.269
2006	611	185	.303
2007	584	143	.245
2008	427	128	.300
2009	630	164	.260
2010	590	161	.273

Batting Average Check

Now pretend that you are a baseball manager and you think that you would like to get Vernon Wells to play for your team. You will want to have an idea of his past performance, so you should look very closely at his batting average in previous years.



Exercise 2

(a) What was Vernon's worst year? What was his AVG that year? (Don't forget: the higher the AVG, the better the batter.)

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(b) How many hits did Vernon get in his best year? What year was his best?

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(c) Now see if you can calculate Vernon's total batting average from 2004 to 2010. (Round to the nearest hundredth)

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