

## March Madness ... Does seeding really matter?

The Men's National College Basketball Tournament is played each March and the tourney is often referred to as "March Madness."

The field of 64 is broken into four regional tournaments with teams seeded 1 through 16. There are four number one seeds, four number two seeds, etcetera. The number one seeds are the top four teams in the tournament. The 16th seeds are generally the worst teams in the tournament or teams 61 – 64.

Since the inception of the 64-team tournament in 1985, each seed pairing has played a total of 136 first-round games. The tournament is set up into the four different regional tournaments (West, Midwest, East, and South). In each region during the first round of games, the top seed, the #1 seed, plays the lowest seed, the #16 seed. The #2 seed plays the #15 seed, the #3 seed plays the #14 seed and so on.

1. Which seed does the #4 seed play?

2. Which seed does the #9 seed play?

Every year there is controversy over the seeding of teams. Some teams and their fans feel like they have been seeded too low, while other teams have been undeservingly seeded too high. Others say that it doesn't matter what your seed is, that if a team is going to win the championships they should be able to beat anyone regardless of their seed.

3. What do you think? **Does seeding really matter?**

4. Let's look at the data and see how various seeds have fared in recent tournament history. In 136 games, a #1 seed has never lost to a #16 seed. This is not the case for the other higher seed teams. Find the winning percentage for each seed below. Before actually calculating the winning percentages, estimate the winning percentage. Use these estimates to make sure your answers are reasonable.

Seed	Times this seeded team has won out of 128 games.	Percentage wins
1	127	
2	121	
3	110	
4	100	
5	84	
6	81	
7	75	
8	57	
9	71	
10	52	
11	47	
12	44	
13	28	
14	18	
15	7	
16	1	

5. How could you estimate the percentages without actually calculating them?

6. On another sheet of paper create a bar graph for the data in the table. Let the x-axis be seed number and the y-axis be number of wins. How does the bar graph help you to better see, understand or communicate the data?

7. Looking at your bar graph and at the data in your table, what do you notice? Is there a general relationship between seed number and number of first round wins? If so, describe it and describe any data that deviates from this relationship.

8. Some people simply pick all the favored teams to win in the first round, while others pick many, many upsets. According to the data, which do you think makes for a better strategy, picking all the favorites or picking lots of upsets? Or do you recommend some other strategy, other than these extremes?

Source: [http://en.wikipedia.org/wiki/NCAA\\_Men%27s\\_Division\\_I\\_Basketball\\_Championship](http://en.wikipedia.org/wiki/NCAA_Men%27s_Division_I_Basketball_Championship)

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