

## 2008 Heisman Trophy Results

3 points 2 points 1 point

Player	School	First	Second	Third	Total points
Sam Bradford	Oklahoma	300	315	196	1,726
Colt McCoy	Texas	266	288	230	1,604
Tim Tebow	Florida	309	207	234	1,575
Graham Harrell	Texas Tech	13	44	86	213
Michael Crabtree	Texas Tech	3	27	53	116
Shonn Greene	Iowa	5	9	32	65
Patrick White	West Virginia	3	1	8	19
Nate Davis	Ball State	0	1	8	10
Rey Maualuga	USC	2	1	1	9
Javon Ringer	Michigan State	1	0	5	8

## 2000 Presidential Election

Candidate	Party	Votes	Percent	Electoral College Votes
George W. Bush	Republican	50,456,002	47.87%	271
Al Gore	Democratic	50,999,897	48.38%	266
Ralph Nader	Green	2,882,955	2.7%	0
Pat Buchanan	Reform	448,895	0.4%	0
Harry Browne	Libertarian	384,431	0.4%	0
Howard Phillips	Constitution	98,020	0.1%	0
John Hagelin	Natural Law	83,714	0.1%	0

Al Gore had plurality of votes  
but lost the election.

Electoral College is another "voting method"

Another examples where the plurality method fails to satisfy the Condorcet Criterion

Number of voters	49	48	3
1st choice	R	H	F
2nd choice	H	S	H
3rd choice	F	O	S
4th choice	O	F	O
5th choice	S	R	R

Who wins?  
by Plurality.

R has more 1st place votes than anyone else  
R wins

H Condorcet Candidate

H vs R  
48 49  
3  

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51 vs 49

H vs F  
97 to 3

H wins every head to head competition.

Nice Web Page to Compare Several Types of Voting Methods



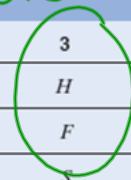
## Insincere Voting (or Strategic Voting)

Three voters decide not to “waste” their vote on F and swing the election over to H in doing so.

The Real Preferences			
Number of voters	49	48	3
1st choice	R	H	F
2nd choice	H	S	H
3rd choice	F	O	S
4th choice	O	F	O
5th choice	S	R	R

The Actual Votes			
Number of voters	49	48	3
1st choice	R	H	H
2nd choice	H	S	F
3rd choice	F	O	S
4th choice	O	F	O
5th choice	S	R	R

Switch vote



## The "Election Spoiler" Controversy

The extremely close race between the Democratic and Republican presidential candidates, Al Gore and George W. Bush, helped to create some additional controversy around the 2000 campaign. Many Democrats claimed that Nader had no realistic chance of winning in the close election. They felt that those who supported Nader should have instead voted for Gore, and that a victory for Gore would have been preferable to a victory for George W. Bush [3]. Many prominent liberal politicians, activists, and celebrities campaigned for Nader [4]; others made the argument of prominent Democrats to voters in swing states, sometimes using the catch phrase "a vote for Nader is a vote for Bush." The Republican Leadership Council ran pro-Nader ads in a few states in a likely effort to split the "left" vote, a tactic from which the Nader campaign disassociated itself.[20] Nader and many of his supporters, including filmmaker Michael Moore, responded with their own catch phrase: "a vote for Gore is a vote for Bush." [21][22] The Nader campaign proclaimed that while Gore was perhaps marginally preferable to Bush, the differences between the two were not great enough to merit support of Gore.[citation needed]

## Results of Bush, Gore, Nader Presidential Vote in 2000



Helsman Trophy Uses this method.  
Point System

In the **Borda Count Method** each place on a ballot is assigned points. In an election with  $N$  candidates we give 1 point for *last* place, 2 points for *second from last place*, and so on.

At the top of the ballot, a *first-place* vote is worth  $N$  points. The points are tallied for each candidate separately, and the candidate with the highest total is the winner.

We call such a candidate the *Borda winner*.

[http://en.wikipedia.org/wiki/Jean-Charles\\_de\\_Borda](http://en.wikipedia.org/wiki/Jean-Charles_de_Borda)



5 candidates

1 <sup>st</sup> place	5 pts
2 <sup>nd</sup>	4 pts
3 <sup>rd</sup>	3 pts
4 <sup>th</sup>	2 pts
5 <sup>th</sup>	1 pt

Same election from earlier

Number of voters	14	10	8	4	1
1st choice: 4 points	A	C	D	B	C
2nd choice: 3 points	B	B	C	D	D
3rd choice: 2 points	C	D	B	C	B
4th choice: 1 point	D	A	A	A	A

plurality  
A wins

C wins  
every head to head vote

A gets  $56 + 10 + 8 + 4 + 1 = 81$  points  
 B gets  $42 + 30 + 16 + 16 + 2 = 106$  points  
 C gets  $28 + 40 + 24 + 8 + 4 = 104$  points  
 D gets  $14 + 20 + 32 + 12 + 3 = 81$  points

B wins by Borda Count

What if the point system is different?

Number of voters	14	10	8	4	1	
1st choice: 4 points	10	A	C	D	B	C
2nd choice: 3 points	5	B	B	C	D	D
3rd choice: 2 points	2	C	D	B	C	B
4th choice: 1 point	1	D	A	A	A	A

points for A

A gets  $140 + 10 + 8 + 4 + 1 = 163$   
 $14(10) + 10(1) + 9(1) + 8(1) + 1(1) = 163$

B gets  $70 + 50 + 16 + 16 + 2 = 154$   
 $14(5) + 10(5) + 8(2) + 4(10) + 1(2) = 178$

C gets  $28 + 40 + 24 + 8 + 4 = 104$   
 $14(2) + 10(10) + 8(5) + 4(2) + 1(10) = 186$










D gets  $14 + 20 + 32 + 12 + 3 = 81$   
 $= 159$   
 C wins

[http://en.wikipedia.org/wiki/Voting\\_system](http://en.wikipedia.org/wiki/Voting_system)



## Attachments

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-  [Heisman Trophy Winner Selection](#)
-  [Alternate Voting Methods for Presidential Primaries](#)
-  [Results of Bush, Gore, Nader Presidential Vote in 2000](#)
-  [Wikipedia Article on Voting Methods and Criteria](#)
-  [Monotonicity Criterion](#)
-  [Wikipedia Voting Systems Page](#)
-  [wikipedia Arrows Impossibility Theorem](#)
-  [Wikipedia Page on Kenneth Arrow](#)
-  [Nice Web Page to Compare Several Types of Voting Methods](#)