

D-Block

Please please please help me out for my math class. Rank your preference for these 5 historical figures from 1-5, with 1 being your favorite and 5 being your least favorite. You must give each figure its own number, no ties. Thanks so much for your help! (I made a mistake so had to do this a second time)

1. **George Washington** (Condorcet winner: wins contests with all other choices)
2. **Eleanor Roosevelt** loses to George Washington by 15-8
3. **Rosa Parks** loses to George Washington by 15-8, loses to Eleanor Roosevelt by 15-8
4. **Napoleon** loses to George Washington by 23-0, loses to Rosa Parks by 19-4
5. **Henry VIII** loses to George Washington by 23-0, loses to Napoleon by 17-6

| | 1 | 2 | 3 | 4 | 5 |
|-----------------------------|---|----|----|----|----|
| 1. George Washington | - | 15 | 15 | 23 | 23 |
| 2. Eleanor Roosevelt | 8 | - | 15 | 17 | 21 |
| 3. Rosa Parks | 8 | 8 | - | 19 | 22 |
| 4. Napoleon | 0 | 6 | 4 | - | 17 |
| 5. Henry VIII | 0 | 2 | 1 | 6 | - |

Ballot report

| | George Washington | Napoleon | Eleanor Roosevelt | Rosa Parks | Henry VIII |
|-----------------------------|-------------------|----------|-------------------|------------|------------|
| William.lorenzen@tufts.edu: | 1 | 4 | 1 | 3 | 5 |
| o: | 1 | 5 | 2 | 3 | 4 |
| sophiemaki@gmail.com: | 1 | 4 | 3 | 2 | 5 |
| mrm02@aol.com: | 3 | 4 | 2 | 3 | 5 |
| : | 1 | 2 | 4 | 3 | 5 |
| : | 1 | 2 | 4 | 3 | 5 |
| jessiekerins@gmail.com: | 1 | 5 | 2 | 3 | 4 |
| eeconstantino@gmail.com: | 3 | 4 | 1 | 2 | 5 |
| : | 1 | 5 | 2 | 3 | 4 |
| Lauren.laifer@tufts.edu: | 3 | 4 | 2 | 1 | 5 |
| : | 1 | 4 | 2 | 3 | 5 |
| : | 3 | 4 | 1 | 2 | 5 |
| : | 1 | 2 | 3 | 4 | 5 |
| : | 2 | 4 | 3 | 1 | 5 |
| ayal.pierce@tufts.edu: | 1 | 2 | 3 | 5 | 4 |
| 404-358-2261: | 3 | 4 | 1 | 2 | 5 |
| erxhi617@gmail.com : | 3 | 4 | 1 | 2 | 5 |
| : | 1 | 4 | 2 | 3 | 5 |
| avery: | 3 | 5 | 1 | 2 | 4 |
| : | 1 | 3 | 5 | 2 | 4 |
| ewpete@gmail.com: | 1 | 4 | 5 | 2 | 3 |

Key: George Washington - G
 Eleanor Roosevelt - E
 Rosa Parks - R
 Napoleon - N
 Henry VIII - H

Condorcet Candidate - G
Majority Candidate - G
 G is a majority candidate by a small margin. G had 12 1st place votes 12/23 (0.5 required for majority)
One-to-One Comparisons

- G:E 15:8
- G:R 15:8
- G:N 23:0
- G:H 23:0
- E:R 15:8
- E:N 18:5
- E:H 21:2
- R:N 19:4
- R:H 22:1
- N:H 17:6

Plurality W-G
 G-12
 E-8
 R-3
 N-0
 H-0

 23

Pairwise Winner - {G}
 G-4 points
 E-3 points
 R-2 points
 N-1 points
 H-0 points

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 3 | 1 | 2 | 1 | 2 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| E | G | G | G | R | G | E | R | G | R | G | E | G | G |
| G | E | R | E | E | N | R | E | N | G | N | R | R | R |
| R | R | E | R | G | R | G | G | E | E | E | G | N | H |
| N | H | N | N | H | E | N | N | R | N | H | H | H | N |
| H | N | H | H | N | H | H | H | H | H | R | N | E | E |

*none of the ballots had a tie

elimination winner - {G}

- 1) Eliminate N, H (neither has 1st place votes)
- 2) Eliminate R
- 3) E-10
G-13

G Wins elimination

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 3 | 2 | 1 | 1 | 2 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| E | G | G | E | G | G | E | E | G | G | G | E | G | G |

turn over →

Extra Credit Vote Gradesheet

Name: HISTORICAL FIGURES

| | | |
|---------------------|--|------|
| Setup of poll (30): | substantive question | (10) |
| | $n \geq 5$ | (10) |
| | $N \geq 20$ | (10) |
| Presentation (40): | 1 sheet of paper, no glue, no tape, no staples | (10) |
| | detailed ballots from website | (10) |
| | 1-1 comparison results from website | (5) |
| | beatpaths results from website | (5) |
| | few ties, and they are marked | (5) |
| | organized and legible, question and key | (5) |
| Analysis (80): | preference schedule and 1-1 comparisons | (15) |
| | graph with margins | (12) |
| | Smith set | (5) |
| | statement about Majority candidate | (2) |
| | statement about Condorcet candidate | (2) |
| | credit for no Condorcet candidate? | (10) |
| | plurality winner(s) | (3) |
| | runoff winner(s) | (4) |
| | elimination winner(s) | (6) |
| | Coombs winner(s) | (6) |
| | pairwise winner(s) | (6) |
| | check on pairwise points | (3) |
| | beatpath winner(s) | (6) |

(10)

-8

"Favorite"
type of
question

Grade (of 150 possible points):

142/150