

Review Voting Methods

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

Use the given information to answer the question.

- 1) Four students are running for president of the Community Service Club: Arthur (A), Brandy (B), Chandra (C), and Darrell (D). The preference ballots for the candidates are shown. Construct a preference table to illustrate the results of the voting. 1) \_\_\_\_\_

DBAC DABC DABC DABC DABC ACBD  
 CABD DABC DBAC DABC ACBD DABC

	Number of votes	7	2	2	1
	First choice	D	D	A	C
A)	Second choice	A	B	C	A
	Third choice	B	A	B	B
	Fourth choice	C	C	D	D

	Number of votes	6	2	3	1
	First choice	D	D	A	C
B)	Second choice	B	A	C	A
	Third choice	A	B	B	B
	Fourth choice	C	C	D	D

	Number of votes	7	2	2	1
	First choice	D	D	C	A
C)	Second choice	A	B	A	C
	Third choice	B	A	B	B
	Fourth choice	C	C	D	D

	Number of votes	2	7	2	1
	First choice	D	D	A	C
D)	Second choice	B	A	C	A
	Third choice	A	B	B	B
	Fourth choice	C	C	D	D

Use the preference table to answer the question.

- 2) Diners at the Rive Gauche restaurant answer a questionnaire about their favorite course in a French meal. The choices are: Appetizer (A), Entree (E), and Dessert (D). Their votes are summarized in the following table. 2) \_\_\_\_\_

Number of Votes	21	13	7	5
First choice	E	D	A	D
Second choice	A	A	D	E
Third choice	D	E	E	A

Which course is selected as the most favorite using the plurality method?

- A) Appetizer                                      B) Dessert                                      C) Entree

- 3) Diners at the Joie de Vivre restaurant answer a questionnaire about their favorite course in a French meal. The choices are: Appetizer (A), Entree (E), and Dessert (D). Their votes are summarized in the following table. 3) \_\_\_\_\_

Number of Votes	18	14	8	6
First choice	E	D	A	D
Second choice	A	A	D	E
Third choice	D	E	E	A

Which course is selected as the most favorite using the Borda count method?

- A) Dessert                                      B) Tie between Appetizer and Entree  
 C) Appetizer                                      D) Tie between Appetizer and Dessert

- 4) Diners at the Joie de Vivre restaurant answer a questionnaire about their favorite course in a French meal. The choices are: Appetizer (A), Entree (E), and Dessert (D). Their votes are summarized in the following table. 4) \_\_\_\_\_

Number of Votes	18	14	8	6
First choice	E	D	A	D
Second choice	A	A	D	E
Third choice	D	E	E	A

Which course is selected as the most favorite using the plurality-with-elimination method?

- A) Entree  
 B) Tie between Dessert and Entree  
 C) Appetizer  
 D) Dessert

- 5) The preference table shows the results of an election among three candidates, A, B, and C. 5) \_\_\_\_\_

Number of votes	10	4	2
First choice	A	B	C
Second choice	B	C	B
Third choice	C	A	A

(a) Using the plurality method, who is the winner?

(b) Is the majority criterion satisfied?

- A) A; yes  
 B) C; yes  
 C) A; no  
 D) B; yes

Use the given information to answer the question.

- 6) The preference ballots for presidency of the Jazz Appreciation Club (A, B, and C) are shown. Fill in the number of votes in the first row of the preference table. 6) \_\_\_\_\_

ACB ACB ACB CBA  
 BAC CBA ACB BAC  
 BAC ACB BAC ACB  
 ACB BAC BAC ACB

Number of Votes	—	—	—
First choice	A	B	C
Second choice	C	A	B
Third choice	B	C	A

A) 

Number of Votes	9	5	2
First choice	A	B	C
Second choice	C	A	B
Third choice	B	C	A

B) 

Number of Votes	8	6	2
First choice	A	B	C
Second choice	C	A	B
Third choice	B	C	A

C) 

Number of Votes	8	6	2
First choice	A	C	B
Second choice	C	B	A
Third choice	B	A	C

D) 

Number of Votes	8	7	1
First choice	A	B	C
Second choice	C	A	B
Third choice	B	C	A