

4. Seventeen board members vote on four candidates, A, B, C, or D, for a new position on their board. Their preference schedules are shown below.

	Number of Members		
	7	6	4
First choice	A	D	E
Second choice	B	A	B
Third choice	D	B	D
Fourth choice	D	C	A

- A. Which candidate will be selected if they use the Hare system?

<p>A = 7 B = 0 C = 4 D = 6</p>	<p>A = 7 C = 4 D = 6</p>	<p>A = 7 D = 10</p> <p style="text-align: center;">D</p>
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- B. Using the Hare system according to the preference schedules shown, what happens if A rejects the offer before the ranking?

<table border="1"> <thead> <tr> <th></th> <th>7</th> <th>6</th> <th>4</th> </tr> </thead> <tbody> <tr> <td>1st</td> <td>B</td> <td>D</td> <td>C</td> </tr> <tr> <td>2nd</td> <td>C</td> <td>B</td> <td>B</td> </tr> <tr> <td>3rd</td> <td>D</td> <td>C</td> <td>D</td> </tr> </tbody> </table>		7	6	4	1st	B	D	C	2nd	C	B	B	3rd	D	C	D	<p>B = 7 C = 4 D = 6</p>	<p>B = 11 D = 6</p> <p style="text-align: center;">B</p>
	7	6	4															
1st	B	D	C															
2nd	C	B	B															
3rd	D	C	D															

5. Consider the following preference table:

	Number of voters			
	4	6	8	4
3 First choice	D	C	A	B
2 Second choice	C	B	D	A
1 Third choice	B	D	C	C
0 Fourth choice	A	A	B	D

- Which candidate will be chosen if the Borda count is used?

	A	B	C	D
0		4	8	12
0		12	18	6
24		0	8	16
8		12	4	0
32		28	38	34

C