Check Your Understanding Voting – Proportional Representation and Approval Voting

The table below identifies some key concepts from this unit. Complete each question, check your answers, and get help as needed.

Key Concepts	Basic Questions	Intermediate Questions	Advanced Questions
Proportional Representation	1	2, 3	
Approval	4	5	

1) A country is using proportional representation to create its government. There will be 225 members of parliament from 4 parties (A, B, C, and D). The results of the election are presented in the table below.

Party	% of Vote
А	33%
В	19%
С	32%
D	16%

How many seats did each party win?

2) There are 5 parties running in an election to fill 185 vacant seats in government. 85 721 people voted in the election and the results are presented in the table below.

Party	# of Votes
A	12 258
В	13 201
С	8 525
D	43 203
E	8 534

Using proportional representation, how many seats does each party win?

received is presented in the tat			
Party	# of Votes		
Liberal	6 018 728		
Conservative	6 239 227		
Bloc Quebecois	1 387 030		
NDP	2 903 722		
Green Party	1 189 607		
Independent	72 546		

3) In 2019, Canada held a federal election and the number of popular votes each party received is presented in the table below.

a) If Canada used a proportional representation system, how many of the 338 seats would each party have received?

b) Since Canada uses a "rep by pop" system with plurality winners, the number of seats each party actually won is presented below. Given this information, why would the party controlling government in Canada (the one with the most number of seats) be unlikely to want to switch to a proportional representation system?

Party	# of seats by "Rep by Pop"		
Liberal	157		
Conservative	121		
Bloc Quebecois	32		
NDP	24		
Green Party	3		
Independent	1		

4) You and 8 friends are trying to choose a restaurant for dinner. Your choices are: pizza, burgers, tacos, shawarma, and Vietnamese. You have all agreed to select the restaurant using approval voting, and the results are presented in the table below.

# of votes	1 2		3	2	1
	Burgers Tacos Vietnamese	Tacos	Pizza Shawarma	Vietnamese Pizza Shawarma	Vietnamese Shawarma

Which restaurant should be chosen?

5) To determine the menu at a high school cafeteria, the 250 Grade 11 students were asked their preferences between Pizza, Hamburgers, and Tacos. The results are presented in the table below.

# of votes	63	51	46	45	24	21
	Pizza Hamburgers	Pizza Tacos	Tacos	Tacos Hamburgers	Hamburgers	Pizza

Using approval voting, which type of food should be served?

Answer Key

- 1) Party A 74 seats; Party B 43 seats; Party C 72 seats; Party D 36 seats
- 2) Party A 27 seats; Party B 29 seats; Party C 18 seats; Party D 93 seats; Party E 18 seats
- 3) A) Lib 114 seats; Cons 119 seats; Bloc 26 seats; NDP 55 seats; Green 23 seats; Ind 1 seat
 B) The winning party would lose seats under proportional representation (why change a system when you won?).
- 4) Shawarma
- 5) Tacos