

NAME: \_\_\_\_\_

Chapter 5 Assignment

PART A (4 points each)

#1- Players are voting to elect their new captain.

	18	6	13
1st choice	Matteo	Marco	Massimo
2 <sup>nd</sup> choice	Marco	Massimo	Matteo
3 <sup>rd</sup> choice	Massimo	Matteo	Marco

Determine the winner if they use an Elimination method

- A) Massimo      B) Marco      C) Massimo and Matteo      D) Matteo

#2 What is the probability that a client has a savings account?

	checking	savings
BMO	110	200
RBC	330	160

- A) 9/20      B) 4/5      C) 11/20      D) 1/3

#3 Determine the probability that a member is in the pilates class, given that the member is wearing shorts

	cycling	pilates	dance
pants	36	40	12
shorts	18	28	30

- A) 17/19      B)  $\frac{1}{2}$       C) 7/19      D) 7/10

PART B (4 points each)

#4 A six-sided die is rolled. Event A is rolling a number divisible by 2. Event B is rolling a number divisible by 3.

Determine  $P(A | B)$

#5 A card is drawn from a 52-card deck. Event A is drawing a 5. Event B is drawing a red card.

Determine  $P(B | A)$ .

#6 Emilia has two albums. The table below shows the number of pictures in each.

	Black & white	color	Total
Album 1	70		370
Album 2		300	
Total			850

Determine the probability that a picture selected at random will be black & white in the second album.

PART C (6 points)

Daviyon is opening a new restaurant. He will survey his friends and family to see what cake's flavor he should put on the "dolce" menu.

Using TWO DIFFERENT VOTING procedures, what cake should be put on the menu?

	35	21	19	35	15
1 <sup>st</sup> choice	Red velvet	vanilla	vanilla	chocolate	Red velvet
2 <sup>nd</sup> choice	pineapple	Red velvet	Red velvet	pineapple	chocolate
3 <sup>rd</sup> choice	vanilla	chocolate	pineapple	vanilla	vanilla
4 <sup>th</sup> choice	chocolate	pineapple	chocolate	Red velvet	pineapple