

Math 1015

Homework #1

#1a, 1b, 2b, 3

#1a

Me	Friend 1	Friend 2	Friend 3	Friend 4	Friend 5	Friend 6	Friend 7
SDD	RC	Wa	RC	Wo	Wa	Wo	RC
Wo	Wo	SDD	SDD	SDD	SDD	Wa	Wo
Wa	Wa	Wo	Wa	RC	Wo	SDD	Wa
RC	SDD	RC	Wo	Wa	RC	RC	SDD

Plurality: SDD: 1  
 RC: 3  
 Wa: 2  
 Wo: 2

RC wins!

#1b

<u>Rd 1:</u>	<u>Rd 2</u>	<u>Rd 3</u>	Wo wins
<del>SDD: 1</del>	RC: 3	RC: 3	
RC: 3	<del>Wa: 2</del>	Wo: 5	
Wa: 2	Wo: 3		
Wo: 2			

#2b

	22%	23%	15%	29%	7%	4%
D	D	H	H	<del>J</del>	<del>J</del>	
H	<del>J</del>	D	<del>J</del>	H	D	
<del>J</del>	H	<del>J</del>	D	D	H	

<u>Round 1</u>	<u>Round 2</u>	<u>H wins</u>
D: 45	D: 49	
H: 44	H: 51	
<del>J: 11</del>		

#3

Many possible answers, like:

$\frac{4}{A}$	$\frac{3}{B}$	$\frac{2}{C}$
B	C	B
C	A	A

Here, A wins plurality

RCV

Rd 1

A: 4

B: 3

~~C: 2~~

Rd 2

A: 4

B: 5

B wins RCV!