

Math 1015 Homework #1

#2, 3, 4

#2 a

<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>4</u>
R	W	D	D	P
D	R	R	R	W
W	D	P	W	D
P	P	W	P	R

b Plurality:

D: 2
P: 4
R: 1
W: 2

P wins!

c RCV:

Rd 1

D: 2
P: 4
~~R: 1~~
W: 2

Rd 2

<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>4</u>
D	W	D	D	P
W	D	P	W	W
P	P	W	P	D

D: 3
P: 4
~~W: 2~~

Rd 3

<u>1</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>4</u>
D	D	D	D	P
P	P	P	P	D

D: 5
P: 4

D wins!

#3

22%	23%	15%	29%	7%	4%
D	D	H	H	J	J
H	J	D	J	H	D
J	H	J	D	D	H

a Plurality:

D: $22 + 23 = 45$

H: $15 + 29 = 44$

J: $7 + 4 = 11$

D wins!

b RCV:

Rd 1

D: 45
H: 44
~~J: 11~~

Rd 2

<u>22</u>	<u>23</u>	<u>15</u>	<u>29</u>	<u>7</u>	<u>4</u>
D	D	H	H	H	D
H	H	D	D	D	H

D: 49

H: 51

H wins!

#4 Many possible answers.

None is:

<u>5</u>	<u>4</u>	<u>3</u>
A	B	C
B	C	B
C	A	A

Plurality winner is A.

RCV Rd 1 C is eliminated

Rd 2:

<u>5</u>	<u>4</u>	<u>3</u>
A	B	B
B	A	A

A: 5

B: 7

B wins RCV