

**a**   Roll-call Vote ( $v$ ) Matrix  $R$

$R$	$v_1$	$v_2$	...	$v_n$
$m_1$	Nay	Yea	...	Yea
$m_2$	Abstain	Nay		Yea
$m_3$	Yea	Nay		Nay
$m_4$	Nay	Yea		Yea
$m_5$	Nay	Nay		Abstain
$m_6$	Abstain	Abstain		Nay

$M$  = Set of senators  $m_i$  for  $i = 1 \dots 6$

**b**   Distance Matrix  $\delta$

$\delta$	$m_1$	$m_2$	$m_3$	$m_4$	$m_5$	$m_6$
$m_1$	0	21.5	15	5	22	11
$m_2$	21.5	0	15.5	23.5	4.5	12.5
$m_3$	15	15.5	0	12	13	16
$m_4$	5	23.5	12	0	23	14
$m_5$	22	4.5	13	23	0	15
$m_6$	11	12.5	16	14	15	0

