

Weighting	Colouring
$w(e_1) = a$	$c(v_1) = aa$
$w(e_2) = b$	$c(v_2) = ab$
$w(e_3) = a$	$c(v_3) = ba$
$w(e_4) = b$	$c(v_4) = ab$
$w(e_5) = a$	$c(v_5) = ba$