

Homework 21: Chapter 22 - Solutions

1. Find the winner by the adjusted winner method for the example from Quiz 17:

	Mint	Van	Fudge	Snick
E	.3	.1	.1	.5
K	.2	.2	.5	.1
E to K valuation ratios	$3/2$	$1/2$	$1/5$	5

- (a) If you give Snick and Mint to E , everything else to K , what are their values for their slices? E gets .8, K gets .6
- (b) If instead you give only Snick to E and everything else to K , what are their values for their slices? E gets .5 and K gets .9
- (c) Split the Mint between E and K in such a way that the division is equitable. Give $4/5$ of Mint to E and the rest to K . Allocate the other components as above.
- (d) What are the properties of this division? Pareto-optimal, equitable, fair, envy-free? the result of the adjusted winner method has all four properties, always