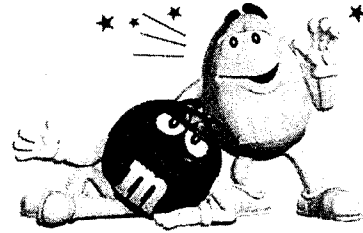


Practice--Apportionment

1. A mother has 50 pieces of identical candy to split among her 5 children. She decides that each child will earn a portion of the candy based upon how many minutes of chores they did during the week. Use each method to apportion the candy.



		<u>SD = 10</u>		<u>MD = 17.1</u>		
child	minutes of chores	SQ	LQ	Hamilton Apportionment	MQ	Jefferson Apportionment
Alan	150	8.333	8	8	8.772	8
Betty	78	4.333	4	4	4.561	4
Connie	173	9.611	9	9+1 = 10	10.117	10
Doug	204	11.333	11	11	11.93	11
Eli	295	16.589	16	16+1 = 17	17.251	17
TOTAL	900	20 50	48	50		50

		<u>MD = 17.75</u>		MD =		
child	UQ	MQ	Webster Apportionment	GM	MQ	Huntington-Hill Apportionment
Alan	9	8.45	8	8.485		8
Betty	5	4.39	4	4.472		4
Connie	10	9.75	10	9.481		10
Doug	12	11.49	11	11.489		11
Eli	17	16.62	17	16.492		17
TOTAL	50		50			50

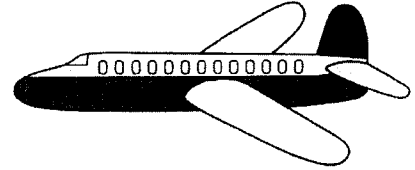
8
 4
 10
 11
 16

 49

8
 4
 10
 11
 17

 50

2. Powell Pacific, a start-up airline company, has created the new Warp Plane. They will start with sixty-five flights per month on three routes. Those routes are: Chicago to New York, Chicago to Los Angeles, and Chicago to Miami. They anticipate 4010 passengers flying from Chicago to New York, 3150 flying from Chicago to Los Angeles, and 1840 flying from Chicago to Miami. Apportion the flights to the routes based on the number of anticipated passengers using the each method.



$$SD = \frac{9000}{65} = 138.462$$

$$MD = \frac{135}{135}$$

route	# of passengers	SQ	LQ	Hamilton Apportionment	MQ	Jefferson Apportionment
Chi to NY	4,010	28.961	28	29	29.704	29
Chi to LA	3,150	22.75	22	23	23.333	23
Chi to Miami	1,840	13.289	13	13	13.63	13
TOTAL	9000	65	63	65		65

route	UQ	MQ	Webster Apportionment	GM	MQ	Huntington-Hill Apportionment
Chi to NY	29		29	28.49%		29
Chi to LA	23		23	22.494		23
Chi to Miami	14		13	13.491		13
TOTAL	~		65	~		85
TOTAL	~	~	~	~	~	~