## Practice Set 20 Nonparametric Hypothesis Testing of Nominal Data

I. Darin feels 20% of the 9-mg part defects are produced by the first shift, 30% by the second shift, and 50% by the third shift. Do an .01 level of significance test to determine whether this sample data follows Darin's proposed distribution. People using statistics software do not need to fill out the second chart.

Analy	sis of Defects Shift 1 Shift 2 Shift 3 Totals				
	Shift 1	Shift 2	Shift 3	Totals	
Shift defects, f <sub>0</sub>	6	11	23	40	
Expected defects, f <sub>e</sub>					

Shift	f <sub>o</sub>	f <sub>e</sub>	f <sub>o</sub> - f <sub>e</sub>	$(f_o - f_e)^2$	$\frac{\left(f_{o}-f_{e}\right)^{2}}{f_{e}}$
Т	otals				