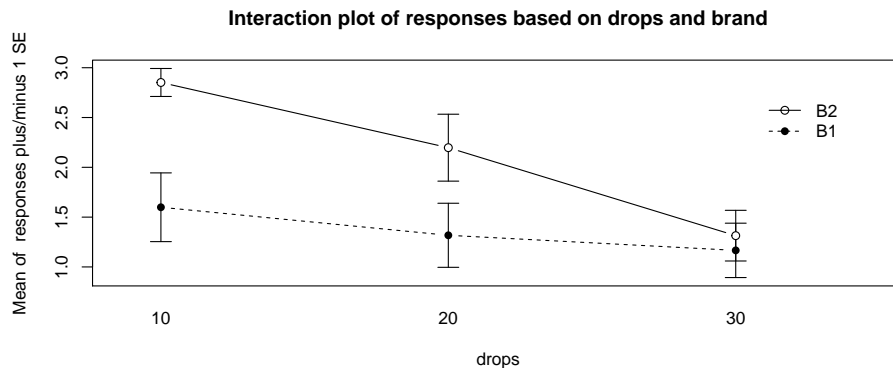


STAT 217: Two-Way Anova, Interaction vs Additive Models 9-28

```
source("~/Documents/Stat217Fall2015/exams/exam1/intplot.R")
intplot(responses~brand*drops,data=pt)
```



```
lm.fit <- lm(responses~brand*drops, data=pt)
anova(lm.fit)
```

Analysis of Variance Table

Response: responses

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
brand	1	4.33	4.33	10.52	0.0035
drops	2	4.86	2.43	5.90	0.0083
brand:drops	2	1.58	0.79	1.92	0.1687
Residuals	24	9.88	0.41		

```
lm.add <- lm(responses~brand+drops, data=pt)
Anova(lm.add)
```

Anova Table (Type II tests)

Response: responses

	Sum Sq	Df	F value	Pr(>F)
brand	4.33	1	9.83	0.0042
drops	4.86	2	5.51	0.0101
Residuals	11.46	26		

```
summary(lm.add)
```

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	1.8454	0.2425	7.611	4.45e-08
brandB2	0.7600	0.2425	3.134	0.00424
drops20	-0.4680	0.2970	-1.576	0.12715
drops30	-0.9853	0.2970	-3.318	0.00269