28. Describing Main Effects and Interactions Exercise

The following data sets are from a factorial design study examining the effects of group and individual therapy over two different lengths of time. For each data set, determine what effects (both main effects and the interaction) are significant. For simplicity, assume that the data are ideal, meaning that any difference between means is a significant difference—no sampling error. Make a bar graph of each significant effect and provide a verbal description of the effect.

a.

| | Therapy type | |
Length	Group	Individual
1 week	100	100
6 weeks	500	500

b.

| | Therapy type | |
Length	Group	Individual
1 week	300	700
6 weeks	200	400

c.

| | Therapy type | |
Length	Group	Individual
1 week	100	400
6 weeks	400	100

d.

| | Therapy type | |
Length	Group	Individual
1 week	250	100
6 weeks	250	400