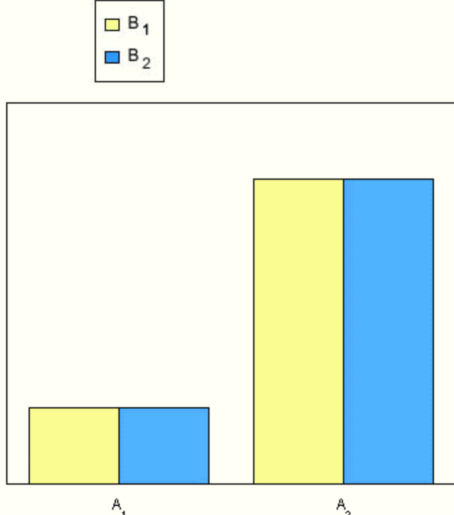
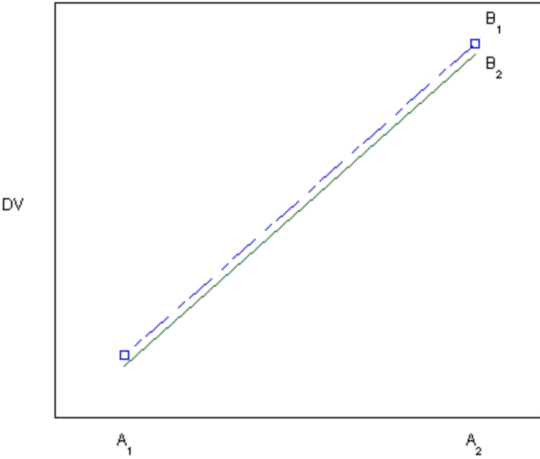
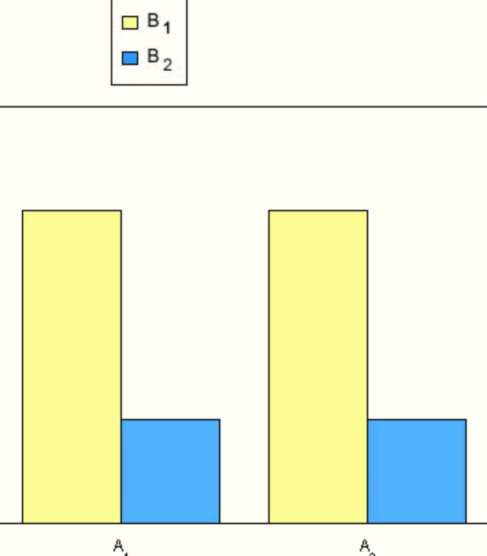
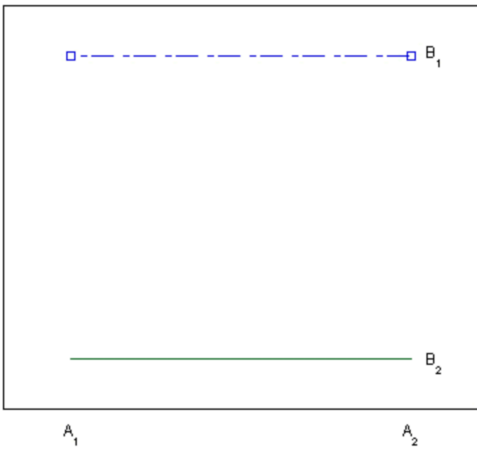
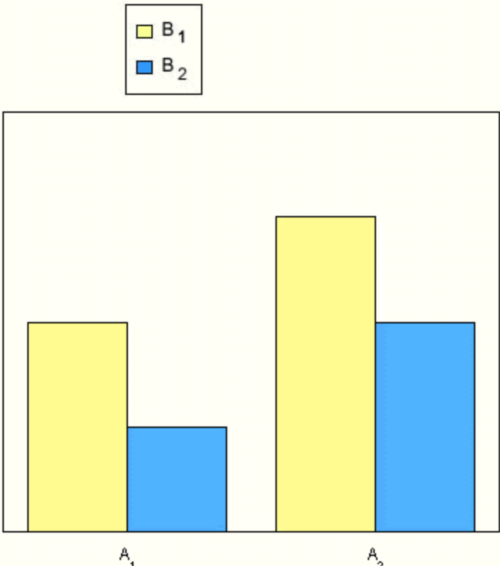
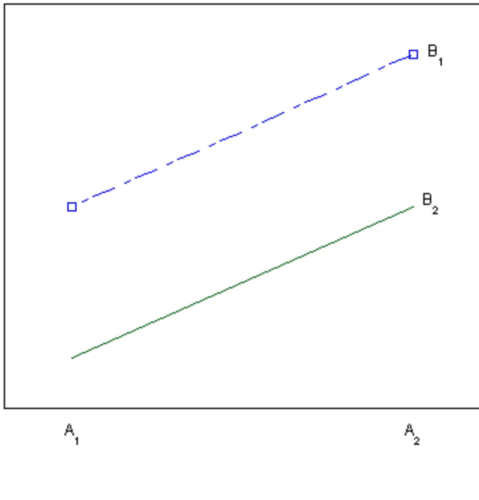
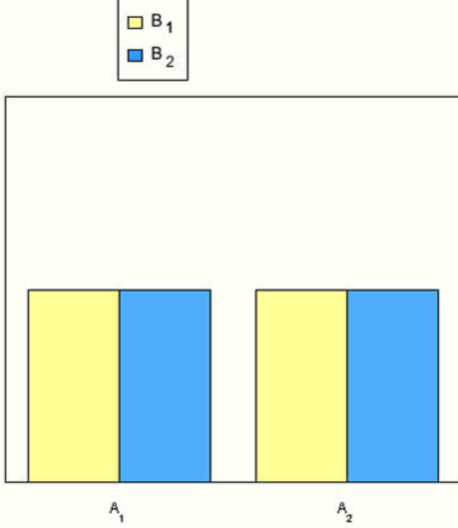
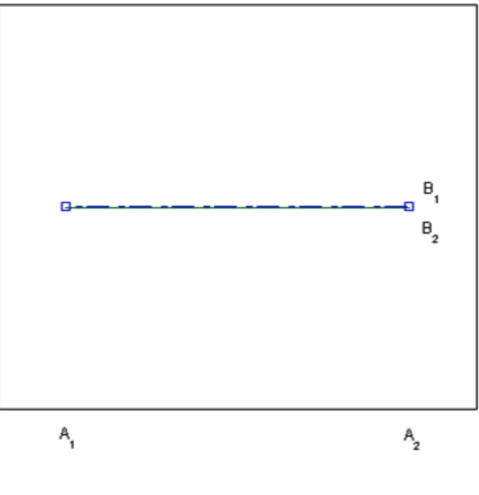
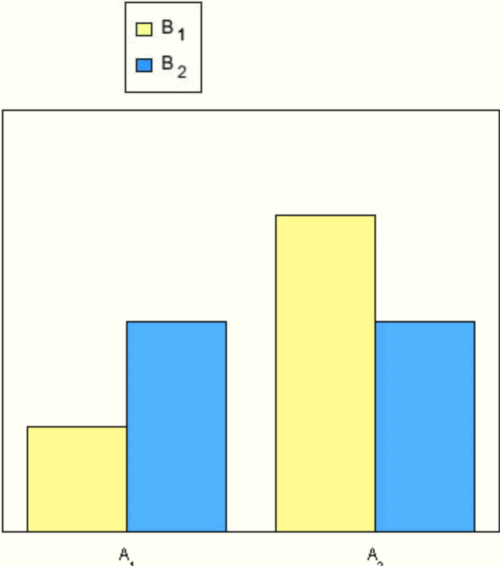
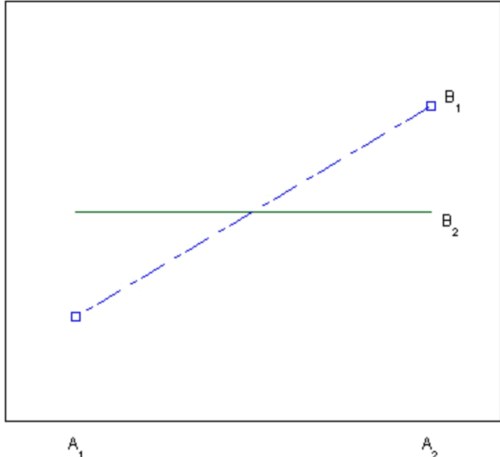
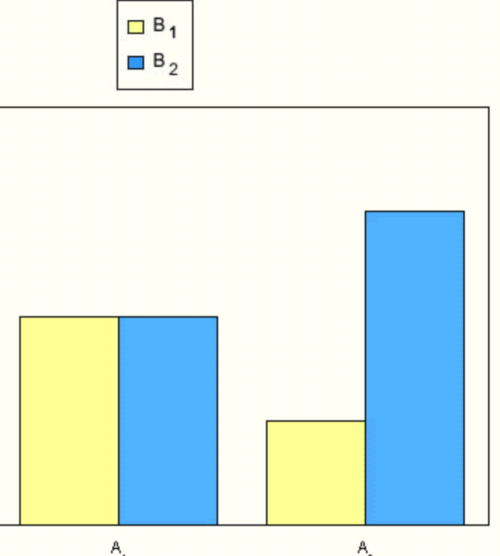
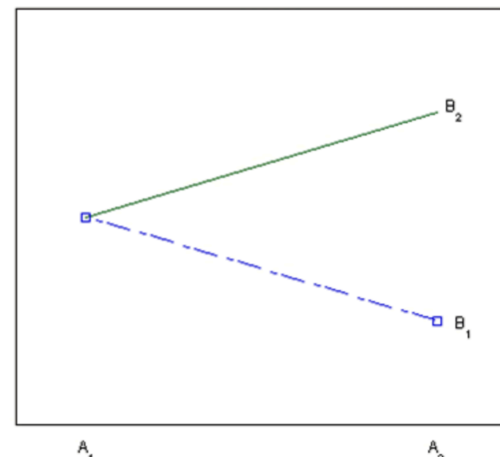
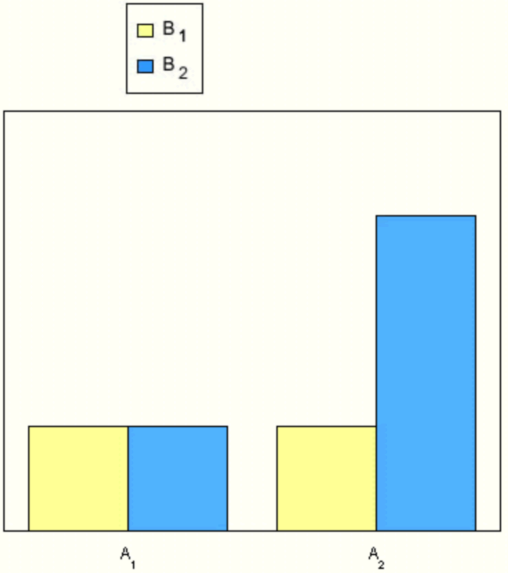
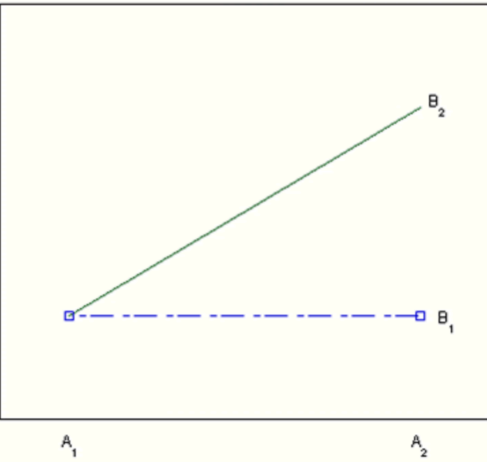
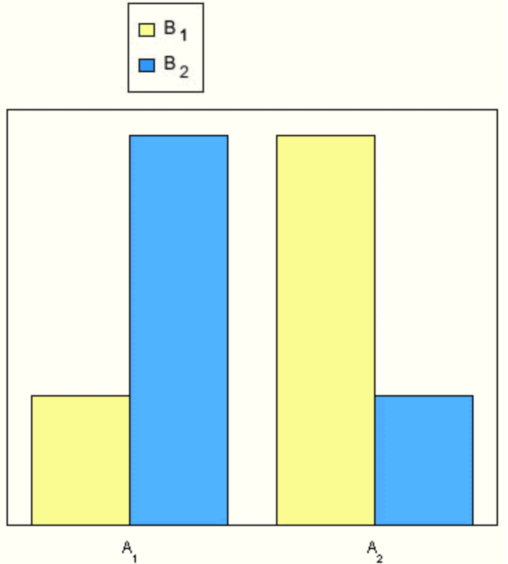
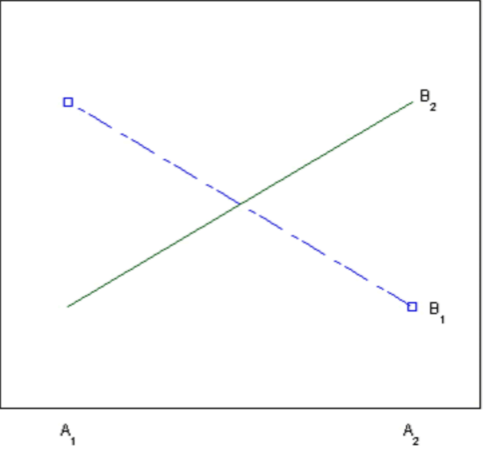


Practice: Main Effects & Interactions

Bar Graph of Data	Line Graph of Data	Effects Observed	Example Experiment
 <p>Bar graph showing DV (Dependent Variable) on the y-axis and A₁, A₂ on the x-axis. The legend indicates B₁ (yellow) and B₂ (blue). For A₁, B₁ is higher than B₂. For A₂, B₁ and B₂ are equal and higher than A₁.</p>	 <p>Line graph showing DV (Dependent Variable) on the y-axis and A₁, A₂ on the x-axis. The legend indicates B₁ (dashed blue line) and B₂ (solid green line). Both lines show a positive slope from A₁ to A₂, with B₁ consistently higher than B₂.</p>	<ul style="list-style-type: none"> • Main effect of IV A? Yes / No • Main effect of IV B? Yes / No • A X B Interaction? Yes / No 	<ul style="list-style-type: none"> • IV A: Caffeine <ul style="list-style-type: none"> ○ A₁: 0 mg ○ A₂: 200 mg • (Pseudo-)IV B: Major <ul style="list-style-type: none"> ○ B₁: <i>Psychology</i> ○ B₂: <i>English</i> • DV: Heart rate
 <p>Bar graph showing DV (Dependent Variable) on the y-axis and A₁, A₂ on the x-axis. The legend indicates B₁ (yellow) and B₂ (blue). For A₁, B₁ is higher than B₂. For A₂, B₁ and B₂ are equal and higher than A₁.</p>	 <p>Line graph showing DV (Dependent Variable) on the y-axis and A₁, A₂ on the x-axis. The legend indicates B₁ (dashed blue line) and B₂ (solid green line). Both lines are horizontal, indicating no change in DV across A₁ and A₂, with B₁ consistently higher than B₂.</p>	<ul style="list-style-type: none"> • Main effect of IV A? Yes / No • Main effect of IV B? Yes / No • A X B Interaction? Yes / No 	<ul style="list-style-type: none"> • IV A: Caffeine <ul style="list-style-type: none"> ○ A₁: 0 mg ○ A₂: 200 mg • (Pseudo-)IV B: Major <ul style="list-style-type: none"> ○ B₁: <i>Psychology</i> ○ B₂: <i>English</i> • DV: Behavioral research methods knowledge

 <p>Bar chart showing DV for A₁ and A₂ across B₁ (yellow) and B₂ (blue). For A₁, B₁ is higher than B₂. For A₂, B₁ is higher than B₂.</p>	 <p>Line graph showing DV for A₁ and A₂ across B₁ (dashed blue line) and B₂ (solid green line). Both lines show an upward trend from A₁ to A₂, with B₁ consistently higher than B₂.</p>	<ul style="list-style-type: none"> • Main effect of IV A? Yes / No • Main effect of IV B? Yes / No • A X B Interaction? Yes / No 	<ul style="list-style-type: none"> • IV A: Caffeine <ul style="list-style-type: none"> ○ A₁: 0 mg ○ A₂: 200 mg • IV B: Exercise <ul style="list-style-type: none"> ○ B₁: Run for 15 min ○ B₂: Sit for 15 min • DV: Heart rate
 <p>Bar chart showing DV for A₁ and A₂ across B₁ (yellow) and B₂ (blue). For A₁, B₁ and B₂ are equal. For A₂, B₁ and B₂ are equal.</p>	 <p>Line graph showing DV for A₁ and A₂ across B₁ (dashed blue line) and B₂ (solid green line). Both lines are horizontal, indicating no change in DV from A₁ to A₂, with B₁ consistently higher than B₂.</p>	<ul style="list-style-type: none"> • Main effect of IV A? Yes / No • Main effect of IV B? Yes / No • A X B Interaction? Yes / No 	<ul style="list-style-type: none"> • IV A: Caffeine <ul style="list-style-type: none"> ○ A₁: 0 mg ○ A₂: 200 mg • IV B: Exercise <ul style="list-style-type: none"> ○ B₁: Run for 15 min ○ B₂: Sit for 15 min • DV: Shoe size

 <p>Bar chart showing DV (Dependent Variable) on the y-axis and A₁, A₂ on the x-axis. The legend indicates B₁ (yellow) and B₂ (blue). For A₁, B₁ is lower than B₂. For A₂, B₁ is higher than B₂.</p>	 <p>Line graph showing DV (Dependent Variable) on the y-axis and A₁, A₂ on the x-axis. The legend indicates B₁ (dashed blue line) and B₂ (solid green line). B₁ is increasing from A₁ to A₂. B₂ is flat across A₁ and A₂.</p>	<ul style="list-style-type: none"> • Main effect of IV A? Yes / No • Main effect of IV B? Yes / No • A X B Interaction? Yes / No 	<ul style="list-style-type: none"> • IV A: Internet connectivity <ul style="list-style-type: none"> ○ A₁: <i>Fast wifi</i> ○ A₂: <i>Slow wifi</i> • IV B: Dictionary type <ul style="list-style-type: none"> ○ B₁: <i>Online dictionary</i> ○ B₂: <i>Physical dictionary</i> • DV: Time taken to find definition of word
 <p>Bar chart showing DV (Dependent Variable) on the y-axis and A₁, A₂ on the x-axis. The legend indicates B₁ (yellow) and B₂ (blue). For A₁, B₁ is higher than B₂. For A₂, B₁ is lower than B₂.</p>	 <p>Line graph showing DV (Dependent Variable) on the y-axis and A₁, A₂ on the x-axis. The legend indicates B₁ (dashed blue line) and B₂ (solid green line). B₁ is decreasing from A₁ to A₂. B₂ is increasing from A₁ to A₂.</p>	<ul style="list-style-type: none"> • Main effect of IV A? Yes / No • Main effect of IV B? Yes / No • A X B Interaction? Yes / No 	<ul style="list-style-type: none"> • (Pseudo-)IV A: Age <ul style="list-style-type: none"> ○ A₁: 60-year-olds ○ A₂: 20-year-olds • IV B: Dictionary type <ul style="list-style-type: none"> ○ B₁: <i>Online dictionary</i> ○ B₂: <i>Physical dictionary</i> • DV: Time taken to find definition of word

 <p>Bar chart showing DV for A₁ and A₂ across B₁ (yellow) and B₂ (blue). For A₁, B₁ is higher than B₂. For A₂, B₂ is higher than B₁.</p>	 <p>Line graph showing DV for A₁ and A₂ across B₁ (dashed blue line) and B₂ (solid green line). B₁ is constant across A₁ and A₂. B₂ increases from A₁ to A₂.</p>	<ul style="list-style-type: none"> • Main effect of IV A? Yes / No • Main effect of IV B? Yes / No • A X B Interaction? Yes / No 	<ul style="list-style-type: none"> • IV A: Party band quality <ul style="list-style-type: none"> ○ A₁: <i>Bad band</i> ○ A₂: <i>Great band</i> • (Pseudo-)IV B: Dancing preference <ul style="list-style-type: none"> ○ B₁: <i>Does not like dancing</i> ○ B₂: <i>Likes dancing</i> • DV: Amount of time spent dancing at party
 <p>Bar chart showing DV for A₁ and A₂ across B₁ (yellow) and B₂ (blue). For A₁, B₂ is higher than B₁. For A₂, B₁ is higher than B₂.</p>	 <p>Line graph showing DV for A₁ and A₂ across B₁ (dashed blue line) and B₂ (solid green line). B₁ decreases from A₁ to A₂. B₂ increases from A₁ to A₂.</p>	<ul style="list-style-type: none"> • Main effect of IV A? Yes / No • Main effect of IV B? Yes / No • A X B Interaction? Yes / No 	<ul style="list-style-type: none"> • IV A: Party band style <ul style="list-style-type: none"> ○ A₁: <i>Jazz</i> ○ A₂: <i>Top 40</i> • (Pseudo-)IV B: Dancing preference <ul style="list-style-type: none"> ○ B₁: <i>Likes dancing to Top 40</i> ○ B₂: <i>Likes dancing to jazz</i> • DV: Amount of time spent dancing at party