Video 12

1. If it were true that two identical twins always had the same height, what would the scatterplot of the heights of several pairs of identical twins look like? What would be the correlation r between the heights?

The scatterplot of the several twins' heights would show a positive correlation or a direct linear scatterplot. The correlation r would be 1, which is a perfect positive correlation.

2. What are all the possible values of the correlation coefficient r?

The value of r is always a value between -1 and 1.

3. If heredity plays a strong role in determining personality, will the correlation between twins raised together be about the same as, or much larger than, the correlation between twins raised apart?

The correlation between twins raised together as opposed to raised apart would be not as strongly related as height, but still show a strong genetic influence.

4. Is it easy to guess how large the correlation is by looking at a scatterplot? Explain.

It wouldn't be very easy with just one scatterplot. The correlation shown by the scatterplots changed once the twins went back home with each other. The scatterplots for genetics vs common environment are different enough to give different results.