U4D4_T Linear and Non-Linear Relations

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U4D4 2.5 Linear and Non-Linear Relations

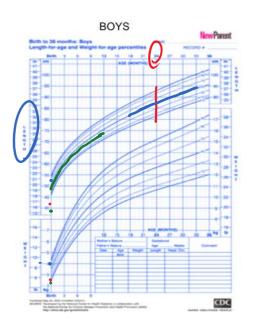
Use the growth chart below to answer the following questions:

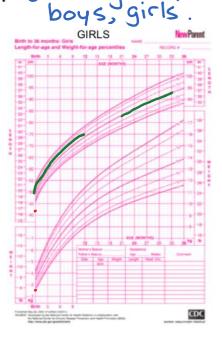
1. A graph of a LINEAR RELATION forms a straight line.

For what age range does the growth of girls and boys appear to be linear?

| 8 mos - 33 mos boys | 18 mos - 33 mos boys | 31 mos - 33 mos diels

2. For what age range does the growth of girls and boys appear to be non-linear? birth - lyear for





Some non-linear relations can be modeled using a CURVE of BEST FIT. The CURVE OF BEST FIT should:

- 1. Follow the general trend of the data
- 2. Pass through as many points as possible while maintaining a SMOOTH curve
- 3. Have a roughly equal number of points above and below the curve as you look from left to right.

Example 1: Plot the following sets of points on a grid. If the points show a linear relationship, draw a line of best fit. If the relation appears non-linear, sketch a curve of best fit. -3 -1 -2 -1 -1 -1 b) c) EXPLORE DESMOS.