

## Goals

- identify relevant numerical data sources and extract numerical data from data tables
- utilize these data to generate graphs that effectively visually represent the data (bivariate line or bar graphs)
- gain comfort and confidence in mathematical skills utilize quantitative data and QR to make informed health decisions

## Assessment

Joshua and Ayelet have been arguing about whether or not the rates of obesity in adults in the United States are increasing or not. Joshua believes that the rates have stabilized in the last few years while Ayelet believes that they still increasing. You have heard both arguments before and want to help your friends sort this out. Please track down the relevant data to answer this question and provide: **(a)** the raw data covering at least the last 20 years for the overall adult population and **(b)** generate a line graph that illustrates the trends. **(c)** After you have gathered the data, please make an argument about who is correct -- Joe or Anne--drawing on the data you have gathered.

**Be sure to cite your data source(s)!"**

d) How confident are you in presenting your findings to your friends?

(Likert scale 1-5)

Part A (1 point):

Has a data table been generated?

Yes	No
Continue	Stop Here: A score of 0 is granted

Has an appropriate source been identified for the data used?

Yes	No
Continue	Stop Here: A score of 0 is granted

Does the data table contain the appropriate data for at least the last 20 years?

Yes	No
1	0

Part B (2 points):

Has a graph been generated?

Yes	No
Continue	Stop Here: A score of 0 is granted

Has an appropriate source been identified for the data used?

Yes	No
Continue	Stop Here: A score of 0 is granted

Does the graph place the appropriate data on the x and y axis?

Yes	No
1	Stop Here: A score of 0 is granted

Does the graph have a title as well as labeled x and y axes?

Label	Yes	No
Title	1/3	0
x axis	1/3	0
y axis	1/3	0

Do the data points on the graph reflect the appropriate data for at least the last 20 years (from the website, not necessary from part A)?

Yes	No
1	Stop Here: A score of 0 is granted

Part C (2 points):

Does the student answer provide a clear declarative answer the question (Increasing, stable decreasing)?

Yes	No
Continue	Stop Here: A score of 0 is granted

Does the student answer provide a clear justification for the Yes or No choice based QR skills?

Answer	Score
No appropriate justification with QR reasoning	0
A justification based only a single data point	1
A justification based multiple	2

numerical points	
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