I will use this as a part of my obesity section it will be preceded by pretest on my vaccine module.

**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 numerical points | 2 |