Quantitative Reasoning Tool 2017

Introduction:

Thank you SO MUCH for volunteering to participate in the 2017 HWC Quantitative Reasoning Assessment. Your participation will help to inform curriculum development, pedagogical practices, and policy decisions at Harold Washington College. Your participation is voluntary and your responses confidential. You can stop your participation at any time. And whether you participate in the survey or not, it will have no impact on your grade. We will only analyze the data in the aggregate (the big picture), not individual responses.

Please answer the following questions honestly and based on your own knowledge, without any help from other people or resources. This is a three-part response. We hope you will use your best effort to help us gather valid data, but you have the right to stop answering questions at any time.

If you have questions or concerns about this assessment process, please contact Carrie Nepstad, Chair of the HWC Assessment Committee at cnepstad@ccc.edu or call 312-553-6095.

Throughout the survey, remember to click the NEXT button to continue to each section. Also remember to never click the browser's back or forward buttons, as this will mess up the survey.

_____I have read the above statement and consent to continue. (Check here.)

Student Identification:

Please enter your 9 digit student ID. Providing this information allows us to reduce the time of this survey and improve its reliability. Again, this information is confidential and not linked to individual student performance.

Give ID Number Here: _____

Where are you taking this survey?

____During class ____Outside of class yet on campus ____Off campus

The following survey contains five multi-part questions. Make sure to finish to the end. Thanks so much!

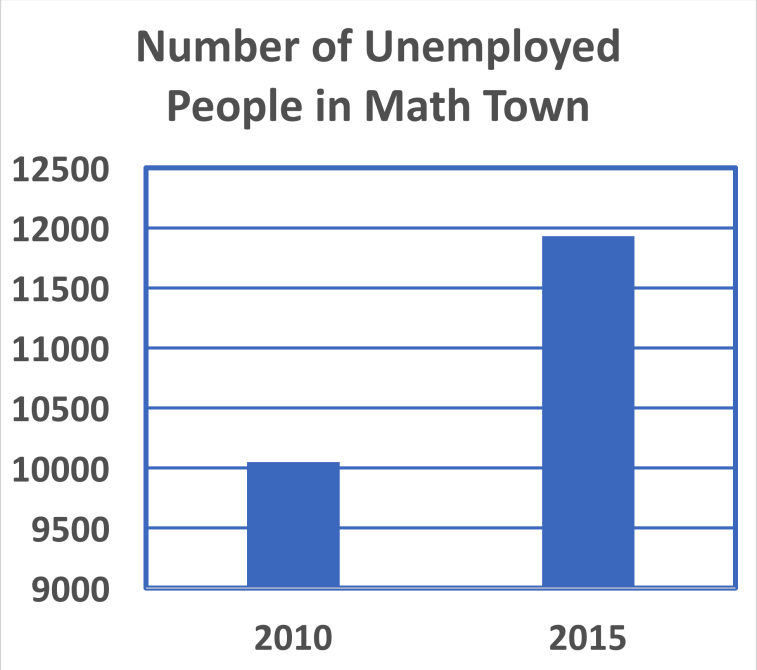
QUESTION #1:

Please indicate your agreement level with each of the following:

	Strongly Disagree	Disagree	Agree	Strongly Agree
1a.) There are often many ways to solve a math problem.	O	O	O	O
1b.) If I work at it, I can do well in math.	O	O	O	O
1c.) I need a good understanding of math to achieve my career goals.	O	O	O	O
1d.) Math is an important tool to help me learn other subjects.	O	O	O	O
1e.) Math helps me to understand current events and make intelligent decisions.	O	O	O	O

QUESTION #2:

Consider the following graph.



2a.) Regarding the above graph, which of the following is ***the best*** approximation of comparing the 2010 and 2015 data?

a. The number of unemployed in 2015 was 2% more than in 2010
b. The number of unemployed in 2015 was 20% more than in 2010
c. The number of unemployed in 2015 was 100% more than in 2010
d. The number of unemployed in 2015 was double what it was in 2010
e. The number of unemployed in 2015 was triple what it was in 2010

2b.) Regarding the above graph, do you think this data is being displayed effectively, or are there problems with the graph? Why? Give a one-sentence answer.

Short answer:

QUESTION #3: There are many ways to calculate unemployment. Here are two of the most common (Thoma, 2014).

U-3 Unemployment Rate	$\frac{number\ unemployed}{number\ unemployed\ +\ number\ employed}$
U-5 Unemployment Rate	$\frac{number\ unemployed\ +\ number\ marginally\ attached\ to\ labor\ force}{number\ unemployed\ +\ number\ marginally\ attached\ to\ labor\ force\ +\ number\ employed}$

The following definitions are also necessary.

Employed	A person currently working a job, including full-time, part-time, and temp work.
Marginally Attached to the Labor Force	A person who is not working a job and has not sought work within the last 4 weeks, yet wants to work and has sought work within the last 12 months.
Unemployed	A person who is not currently working a job yet has looked for work within the last 4 weeks.

3a.) Considering the definitions above, suppose a certain neighborhood in a large city has 9,000 residents who are employed, 1000 residents who are unemployed, and 2000 residents who are marginally attached to the labor force. What is the U-3 Unemployment Rate as a percent?

a. 10%
b. 15%
c. 20%
d. 25%
e. 30%

3b.) Considering the definitions above, suppose again that a certain neighborhood in a large city has 9,000 residents employed, 1000 residents unemployed, and 2000 residents marginally attached to the labor force. What is the U-5 Unemployment Rate as a percent?

a. 10%
b. 15%
c. 20%
d. 25%
e. 30%

3c.) Considering the definitions above, suppose a city council member from the previously mentioned neighborhood is running for re-election on a platform of continuing the good economic work done for the neighborhood over the past four years. Which unemployment rate do you think this council member is more likely to cite, and why? Give a one-sentence answer.

Short answer:

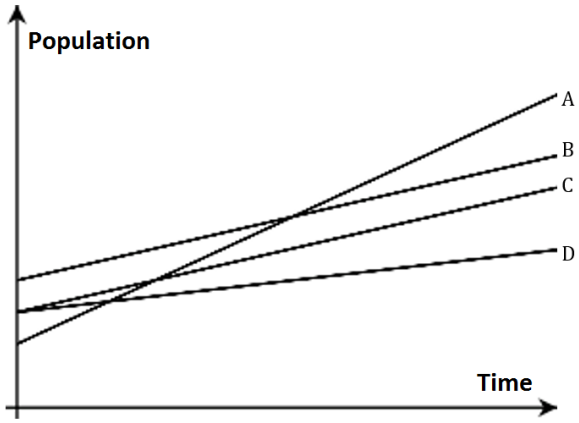
QUESTION #4:

Suppose it's Black Friday tomorrow and Best Buy is advertising a flat screen TV on sale for 40% off the regular price of $499.99, and it will be further reduced by 15% off of that sale price if you make it there by 7am! Target is selling the same tv throughout the day tomorrow at 50% off the same original price. Which of the following do you think is the accurate statement?

a. Best Buy has the better deal.
b. Target has the better deal.
c. They are the same.

QUESTION #5:

Consider the following graph.



5a.) Consider the graph above, which two populations begin with the same number of members?

a. A and B
b. B and C
c. C and D
d. A and C
e. There is not enough information provided to answer the question.

5b.) Considering the graph above, after how much time do populations A and B have the same population?

a. 5 years
b. 10 years
c. 15 years
d. 20 years
e. There is not enough information provided to answer the question.

5c.) Considering the graph above, which two populations grow at the same rate?

a. A and B
b. B and C
c. C and D
d. A and C
e. There is not enough information provided to answer the question.

Feel free to share any comments you have about this survey that you want us to know.

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Thank you SO much for your time!