

# MTH 101

## Practice Questions for Midterm Exam

1. Choose ALL statements that are correct based on **FIG 1.2**?
  - A. About 8 in 10 people who have used online dating believe that online dating is good.
  - B. About one-in-four people who have not used online dating believe that people who use online dating are desperate.
  - C. 69% of people who have used online dating believe that online dating does not keep people from settling down.
  - D. The number of people who have not used online dating but think online dating is more dangerous than other ways of meeting is more than the number of people who have used online dating but think online dating is more dangerous than other ways of meeting.
2. Is the pie chart given on Slide 5 correctly displaying data given in the **TABLE 1.1**? Explain.
3. Is the bar graph given on Slide 6 correctly displaying data given in **TABLE 1.1**? Explain.
4. Based on **TABLE 1.1**, \_\_\_\_\_percent of adults 35-44 years old know someone who uses online dating. From this we can deduce that \_\_\_\_\_ percent of adults 35-44 years old do NOT know someone who uses online dating.

True or False (based on **TABLE 1.1**):

- A. According to the table, the number of adults 18-24 year olds who know someone who uses online dating is larger than the number of 55-64 year olds who know someone who uses online dating.
  - B. According to the table, about three quarters of adults with high school grad or less do not know anyone who uses online dating.
  - C. The table must be wrong because it states that 41% of all adults know someone who uses online dating but that is not the average of all of the percents given in the table.
5. Write two wrong statements and one right *describing the number 18 from FIG 2.1 above*. Swap with your neighbor to quiz each other.
  6. Based **FIG 2.2**, can we conclude that there are more Silent Generation people (in absolute numbers) who are married than there are Millennials who are married? Explain.
  7. Combine the data from **FIG 2.2** and **FIG 2.3** above to find the number of Millennials who have never been married as of 2017.
  8. Based on **FIG 2.2** and **FIG 2.3**, can we conclude that there are more Boomers who are separated than there are Silent Generation people who are separated? Explain.
  9. Based on **FIG 2.2** and **FIG 2.3**, can we conclude that there are more Silent Generation people who are separated than there are Millennials who are separated? Explain.

10. The authors state that “In 1965, when Silent women were young, a majority (58%) were not participating in the labor force and 40% were employed. Among Millennials, that pattern has flipped. Today, 71% of young Millennial women are employed, while 26% are not in the labor force.” Make a graph to illustrate this.
11. Based on the data in the **FIG 3**, make a pie chart to represent the educational attainment of Millennial women.
12. “Immigrants today account for 13.5% of the U.S. population, nearly triple the share (4.7%) in 1970. However, today’s immigrant share remains below the record 14.8% share in 1890, when 9.2 million immigrants lived in the U.S.”

Use this information to calculate the U.S. population in 1890.

13. Use **FIG 4** to calculate the percent change in life expectancy for females born in 1970 to females born in 1990.
14. Use **FIG 4** and extrapolation to predict the life expectancy for males born in 2030.
15. Use **FIG 4** and interpolation to predict the life expectancy for females born in 1987.
16. Use the data in **FIG 5.1** and **FIG 5.2** to calculate the total population of America in 1960.
17. Using **FIG 5.2** and interpolation, we estimate that the population of Americans living in multigenerational households in 1975 was:
  - A. ~26.5 million
  - B. ~24 million
  - C. ~ 28 million
  - D. Not possible to interpolate from this graph.
18. Using **FIG 5.1** and extrapolation, we estimate that the percent of Americans living in multigenerational households in 2023 will be:
  - A. 17%
  - B. 20%
  - C. 23%
  - D. 30%
19. What data in **FIG 5.1** supports the title “One-in-five Americans live in a multigenerational household”?
20. True or False:

According to **FIG 5.1**, the number of Americans living in a multigenerational household in 1970 was more than the number of Americans living in a multigenerational household in 1980.