

✓ Congratulations! You passed!

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1. What is an appropriate way to visualize a list of the eye colors of 120 people? Select all that apply.

1 / 1 point

☐ box plot

☒ pie chart

✓ Correct
That's correct.

☒ dot plot

✓ Correct
That's correct.

2. According to [the histogram of travel times to work from the US 2000 census \(Page 6 of "Journey to Work: 2000"\)](#), roughly what percentage of commuters travel more than 45 minutes?

1 / 1 point

12.5

✓ Correct

3. According to [the histogram of travel times to work from the US 2000 census \(Page 6 of "Journey to Work: 2000"\)](#), approximately what is the median travel time, in minutes (i.e. 50% of commuters have at most that travel time, 50% have at least that travel time)?

1 / 1 point

20

✓ Correct

4. You want to investigate whether households in California tend to have a higher income than households in Massachusetts. Which summary measure would you use to compare the two states?

1 / 1 point

☐ mean household income

☐ 3rd quartile of household income

☒ median household income

✓ Correct
That's correct.

5. Suppose all household incomes in California increase by 5%. How does that change the mean household income?

1 / 1 point

☐ the mean household income doesn't change

☐ cannot be determined from the information given

☒ the mean household income goes up by 5%

✓ Correct
That's correct.

6. Suppose all household incomes in California increase by 5%. How does that change the median household income?

1 / 1 point

☐ cannot be determined from the information given

☒ median household income goes up by 5%

☐ the median household income doesn't change

✓ Correct
That's correct.

7. Suppose all household incomes in California increase by 5%. How does that change the standard deviation of the household incomes? 1 / 1 point

- ☒ the standard deviation of the household incomes goes up by 5%
- ☐ the standard deviation of the household incomes doesn't change
- ☐ cannot be determined from the information given

✓ **Correct**
That's correct.

8. Suppose all household incomes in California increase by 5%. How does that change the interquartile range of the household incomes? 1 / 1 point

- ☐ cannot be determined from the information given
- ☐ the interquartile range of the household incomes doesn't change
- ☒ the interquartile range of the household incomes goes up by 5%

✓ **Correct**
That's correct.

9. Suppose all household incomes in California increase by \$5,000. How does that change the mean household income? 1 / 1 point

- ☐ the mean household income doesn't change
- ☐ cannot be determined from the information given
- ☒ the mean household income goes up by \$5,000

✓ **Correct**
That's correct.

10. Suppose all household incomes in California increase by \$5,000. How does that change the median household income? 1 / 1 point

- ☐ the median household income doesn't change
- ☐ cannot be determined from the information given
- ☒ the median household income goes up by \$5,000

✓ **Correct**
That's correct.

11. Suppose all household incomes in California increase by \$5,000. How does that change the standard deviation of the household incomes? 1 / 1 point

- ☐ the standard deviation of the household incomes goes up by \$5,000
- ☐ cannot be determined from the information given
- ☒ the standard deviation of the household incomes doesn't change

✓ **Correct**
That's correct.

12. Suppose all household incomes in California increase by \$5,000. How does that change the interquartile range of the household incomes? 1 / 1 point

- ☐ the interquartile range of the household incomes goes up by \$5,000
- ☒ the interquartile range of the household incomes doesn't change
- ☐ cannot be determined from the information given

✓ **Correct**
That's correct.

13. The median sales price for houses in a certain county during the last year was \$342,000. What can we say about the percentage of sales represented by the houses that sold for more than \$342,000? 1 / 1 point

- ☐ the houses that sold for more than \$342,000 represent more than 50% of all sales
- ☒ the houses that sold for more than \$342,000 represent exactly 50% of all sales
- ☐ the houses that sold for more than \$342,000 represent less than 50% of all sales

✓ **Correct**
That's correct.

