1. David asked 50 students at his school the number of pets they own. The results are in the table below.

Number of Pets	Responses
0	2
1	27
2	15
3	5
4 or more	1

Based on the table, which statement is true?

A   Most students own 2 or more pets.
B   Most students own fewer than 2 pets.
C   About 27% of the students own 1 pet.

2. The frequency table below displays how many consecutive years the students in one class have lived in their current town.

Number of Years	Number of Students
1–3 years	11
4–6 years	4
7–9 years	3
10–12 years	2

Based on this data, which conclusion could be reached about the number of years all students in the school have lived in their current town?

A   Fewer students in the school have lived in their current town more than 6 years than have lived in their current town less than 6 years.
B   More than half of all the students in the school have lived in their current town for at least 4 years.
C   20% of all the students in the school have lived in their current town 7 to 12 years.
D   11% of all the students in the school have lived in their current town 1 to 3 years.

3. Isaac surveyed 60 students about their favorite lunch beverage. The results are in the table below.

Drink	Responses
Water	14
Milk	27
Juice	13
Soda	6

Based on the information in the table, which statement is **not** true?

A   Most students drink milk at lunch.
B   More students prefer water than juice at lunch.
C   Ten percent of the students drink soda at lunch.
D   Two-thirds of the students drink milk or juice at lunch.

4. Raymond took a survey of classmates to determine the favorite subject of the students in his middle school. The results of his survey are shown in the table.

Raymond's Survey Results

Subject	Number of Votes
English	9
Math	17
Science	13
Social Studies	11

There are 300 students in Raymond's middle school. Based on his results, approximately how many students in his school would be expected to choose math as their favorite subject?

A   17
B   100
C   102
D   170

5. Polly asked the students in her class their favorite color. She recorded their responses in the table below.

Favorite Color	Responses
blue	10
yellow	4
pink	8
purple	4
orange	2

Based on the information in the table, which statement is true?

A   More students chose yellow than purple.

B   More than half of the students chose blue.

C   More than $\frac{1}{4}$ of the students chose pink.

6. Richard surveyed students at his school to determine the different types of chores that are done at home. The results are in the table below.

Chores	Responses
cutting the grass	15
ironing clothes	13
Laundry	21
Vacuum	19
washing dishes	23
washing the car	29
Other	10

Based on the information in the table, which statement is *not* true?

A. Less than 50% of the students surveyed wash dishes or wash the car.

B. Of the students surveyed, 10% of them fold clothes.

C. Of the students surveyed, a majority of them do chores outside.

D. Of the students surveyed, 33% wash dishes or do another chore.

7. A principal asked 40 students how they got to school in the morning.

- Thirty students said they rode the school bus.
- Two students said they walked to school.
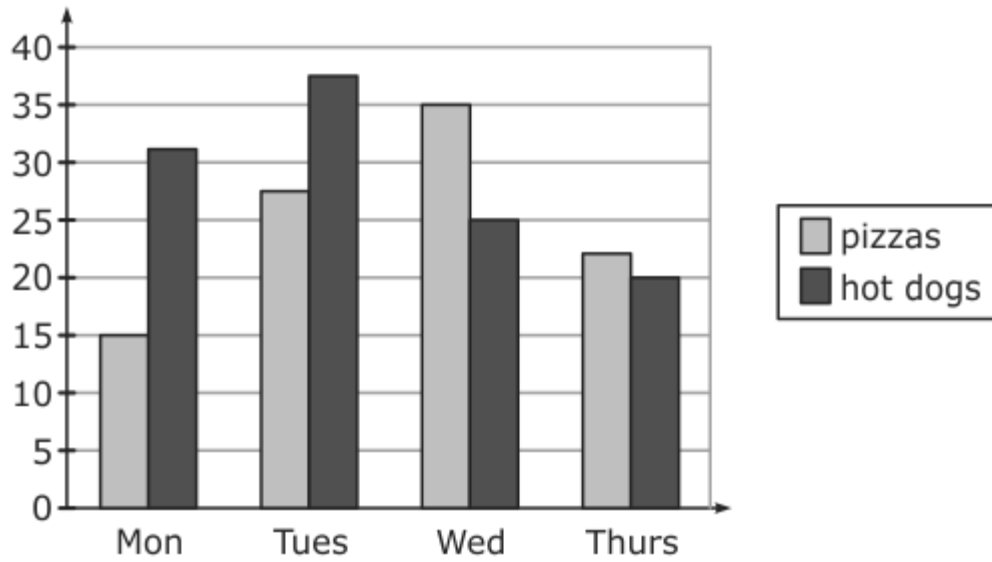- Eight students said they rode in a car.

Based on this information, which statement is true?

A. 10% of the students either walk or ride in a car to school.

B. 30% of the students ride the bus to school.

C. 5% of the students walk to school.

8. A restaurant recorded the number of pizzas and hot dogs sold for 4 days. The data is shown below.

Based on the graph, which statement is true?

A. Twice as many hot dogs as pizzas were sold.

B. More hot dogs than pizzas were sold.

C. More pizzas than hot dogs were sold.

9. A survey asked 200 seventh-grade students which activity they participate in on Saturday. The students' responses are in the table below.

Saturday Activity	Responses
play sports	64
watch television	37
play with friends	78
study for school	21

Based on the table, which statement is true?

A. Over half of the students play with friends on Saturday.

B. About 10% of the students study for school on Saturday.

C. More students watch television than play sports on Saturday.

10. John surveyed students at his school about their favorite food on the cafeteria menu. The results are in the table below.

Favorite Food from Cafeteria Menu

Food	Responses
pizza	15
hot dogs	18
chicken	7
grilled cheese	10

Which statement is true about the students John surveyed?

A. More than half of the students preferred hot dogs or grilled cheese.

B. More than half of the students preferred pizza or grilled cheese.

C. More than half of the students preferred hot dogs or chicken.

D. More than half of the students preferred pizza or chicken.

11. The U.S. House of Representatives has 435 members. The data sets consist of random samples of their ages taken on 3 consecutive days.
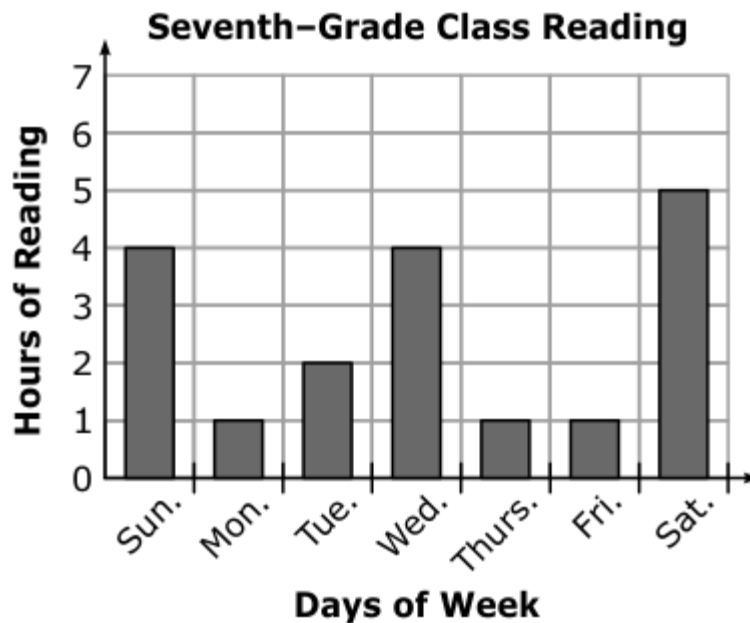
Data Set 1: 46, 52, 55, 82, 67, 52, 43, and 57.

Data Set 2: 66, 53, 55, 47, 49, 41, 54, and 56.

Data Set 3: 48, 61, 29, 46, 69, 39, 59, and 40.

What is a likely cause of the variation in the means of the three data sets?

A. There are fewer than 50 data points.

B. There are outliers in Data Set 1 and Data Set 3.

C. The three random samples were all taken during the same week.

D. The three random samples of data were taken by different people.

12. The graph below shows the average number of hours students in a 7th grade class read each day last week.

Seventh–Grade Class Reading

Based on the graph, on which two days combined did students read the most?

A. Sunday and Wednesday

B. Tuesday and Thursday

C. Friday and Saturday

13. The tables below show the results of a survey that asked a random sample of 135 boys and girls from two schools in a city what their favorite sport was.

SCHOOL 1

	Boys	Girls
Tennis	18	32
Soccer	42	15
Swimming	12	16

SCHOOL 2

	Boys	Girls
Tennis	15	35
Soccer	35	20
Swimming	14	14

Based on the survey results, which inference could NOT be properly drawn?

A. The favorite sport of most of the girls at the schools is tennis.

B. The favorite sport of most of the boys at the schools is soccer.

C. In School 2, the number of boys whose favorite sport is swimming is about the same as the number of girls whose favorite sport is swimming.

D. At both schools, the number of the students whose favorite sport is tennis is almost the same as the number of students whose favorite sport is swimming.

14. A restaurant owner asked 100 customers to choose their favorite side items. The results are in the table below.

Side Item	Responses
salad	21
soup	19
sweet potato	8
baked potato	52

Based on the information in the table, which statement is true?

A. Over $\frac{1}{4}$ of the customers chose salad.

B. Over $\frac{1}{4}$ of the customers chose soup.

C. Most of the customers chose baked potato.

D. Most of the customers chose salad or soup.

15. A local newspaper runs poll estimates each time there is a mayoral election in the town of Shadyville. The voting population of the town is approximately 60,000, with an equal number of men and women. The current mayoral election has 4 candidates. The newspaper interviewed 2,800 women and 3,200 men to find out which candidate they planned to vote for and organized the results in the table below.

Candidate's Name	Females Voting for Candidate	Males Voting for Candidate
Gutierez	1,000	400
Meyer	600	600
Newport	300	1,200
Rogers	900	1,000

Based on the results of this survey, who will **most likely** win the mayoral election?

A. Gutierez

B. Meyer

C. Newport

D. Rogers

16. The table below displays the top flavors of ice cream sold to customers on a given day.

Flavor	Number of Customers
chocolate	51
vanilla	46
strawberry	52
mint	51

Based on the results, which statement is true?

A. More than 50% of the customers bought chocolate.

B. About 50% of the customers bought strawberry.

C. More than 25% of the customers bought vanilla.

D. About 25% of the customers bought mint.

17. The table below shows the number of hours students spend playing video games at home.

Video Game Playing Time

Hours Played	Students
0	2
1	4
2	6
3	8
4	5
5 or more	3

Which is a valid inference about the data?

A. More than 50% of students spend 2 or 3 hours playing video games.

B. Less than $\frac{1}{3}$ of the students spend 4 or more hours playing video games.

C. Less than $\frac{1}{3}$ of the students spend 1 or 2 hours playing video games.

D. More than 50% of the students spend 3 or 4 hours playing video games.

18. Brianna created a table for her survey results. She asked students at her school what time they wake up during the week.

Time	Responses
6:00 a.m.	10
6:30 a.m.	18
7:00 a.m.	25
7:30 a.m.	7

Based on the information in the table, which statement is true?

A. About 10% of the students wake up at 6:00 a.m.

B. More than $\frac{3}{4}$ of the students wake up at 6:30 a.m. or 7:00 a.m.

C. More than $\frac{2}{5}$ of the students wake up at 7:00 a.m.

D. Less than 10% of the students wake up at 7:30 a.m.

19. Candice surveyed students about the average number of hours they spend on homework each night. The results are in the table below.

Number of Hours	Responses
less than 1	12
1	25
2	18
3	10
4	7
more than 4	3

Which statement is true?

A. Less than $\frac{1}{2}$ of the students spend 1–2 hours a night on homework.

B. Less than $\frac{1}{3}$ of the students spend 2–3 hours a night on homework.

C. About 25% spend 1 hour a night on homework.

D. About 25% spend 3 or more hours a night on homework.

20. Veronica surveyed students at her school about the number of televisions at their home. The results are shown in the table below.

Number of Televisions	Number of Students
0	16
1	71
2	11
3	2

Based on these results, which statement is true?

A. The number of students who do not have a television is less than 15%.

B. The number of students who have 1 television is more then 75%.

C. The number of students who have 1 or 2 televisions is over 90%.

D. The number of students who have 3 televisions is less than 5%.

21. In a school, 60 students were randomly chosen and were surveyed about their favorite subject. Of the 60 students, 24 students chose math as their favorite subject. Based on the survey results, about how many of the 350 total students at the school would be expected to choose math as their favorite subject?

A. 40

B. 84

C. 140

D. 314

22. Jack asked students at his school how many musical instruments they know how to play. The results are in the table below.

Number of Instruments	Responses
0	38
1	26
2	5
3 or more	1

Based on the information in the table, which statement is true?

A. Over 50% do not know how to play an instrument.

B. About 26% know how to play 1 instrument.

C. Over 50% can play 1 or more instruments.

D. Less than 1% can play 3 or more instruments.

23. Joshua asked 60 students at his school what their favorite lunch was. The results are in the table below.

Favorite Lunch	Responses
spaghetti	10
hot dogs	20
pizza	30

Based on the information in the table, which statement is true?

A. Most students chose hot dogs as their favorite lunch.

B. Half of the students chose pizza as their favorite lunch.

C. 10% of the students chose spaghetti as their favorite lunch.

24. Claudia conducted a survey to determine favorite milk preference. The results are in the table below.

Type of Milk	Responses
Skim	14
1%	24
2%	32
Whole	16
Soy	4

Which statement is true about the people Claudia surveyed?

A 14% preferred skim milk
B less than half preferred 2% or whole milk
C 30% preferred skim or whole milk
D less than one-third preferred 1% or soy

25. A middle school has a student population of 800 students. A random group of 60 students at the school were asked if they would vote for a tiger as a school mascot. All but 3 of these students said they would vote for a tiger as a mascot. Based on this survey, which number is a reasonable prediction for the number of students out of the total student population who would **most likely** vote for a tiger as a mascot?

A. 760

B. 400

C. 57

D. 40

26. A deli that just opened was giving out free mini sandwiches. A sample of 50 likely customers was surveyed about which sandwich they preferred. The people surveyed included 12 people who said they preferred the roast beef sandwich. Based on this information, how many of the first 150 sandwich orders should the deli predict will be for roast beef?

A. 8

B. 24

C. 36

D. 48

27. A teacher surveys 50 of his eighth grade students about the number of hours of television they watch daily and gets the following results.

Daily Television Viewing

Number of Hours	Number of Students
0	8
1	12
2	10
3	7
4	7
More than 4	6

Which conclusion is **not** true?

A. Most eighth graders watch 2 to 3 hours of television daily.

B. Most eighth graders watch less than 3 hours of television a day.

C. Few eighth graders watch more than 4 hours of television daily.

D. Most eighth graders watch at least 1 hour of television daily.

28. Marshall asked students at his school their favorite subject. The students' responses are in the table below.

Favorite School Subject

Subject	Responses
math	32
language arts	15
science	21
social studies	32

Based on the information in the table, which statement is true?

A. More than $\frac{1}{2}$ of the students chose science or social studies.

B. More students chose math than social studies.

C. More than 50% of the students chose language arts or science.

29. A cafeteria manager conducted a survey to determine the preference for juice. She surveyed every 10th student who went through the lunch line. The results are in the table below.

Favorite Juice	Votes
orange	10
lemonade	13
apple	25
grape	20
tomato	8

Which statement is true?

A. Tomato juice was the most preferred juice.

B. Of the students surveyed, 25% preferred apple juice.

C. More than 50% of the students preferred apple and grape juice.

D. More than one-third of the students preferred orange juice or lemonade.

30. Four students are running for class president in the seventh grade. Sixty students in the seventh grade were randomly chosen to take a survey asking whom they planned to vote for. The results of the survey are shown below.

Name of Candidate	Number of Female Students Voting for Candidate	Number of Male Students Voting for Candidate
Aarav	10	4
Gavin	6	6
Madelyn	3	12
Nevaeh	9	10

There are a total of 140 seventh grade students. Based on the survey, who **most likely** will be the class president?

A. Aarav

B. Gavin

C. Madelyn

D. Nevaeh

1		11		21	
2		12		22	
3		13		23	
4		14		24	
5		15		25	
6		16		26	
7		17		27	
8		18		28	
9		19		29	
10		20		30	