TEST NAME: NAMSCM811314SP.4

TEST ID: **113241**

GRADE: 08

SUBJECT: **Mathematics**TEST CATEGORY: **My Classroom**

| Student: | |
|----------|--|
| Class: | |
| Date: | |

1. At a school, students were surveyed about their preference of ice cream flavor. The results are shown in the table below.

| | Vanilla | Chocolate | Strawberry |
|-----------|---------|-----------|------------|
| 7th Grade | 58 | 62 | 30 |
| 8th Grade | 38 | 79 | 45 |

Based on the table, **about** what percent of the students preferred Chocolate ice cream?

- A 20%
- B. 25%
- c. 45%
- D. 78%
- ^{2.} A survey was conducted to determine if different age groups exercise daily. The results are shown in the table.

| | 18-30 years | 31-42 years |
|-----------------------|-------------|-------------|
| Exercise daily | 36 | 40 |
| Do not exercise daily | 28 | 32 |

- A About 56% of those surveyed exercise daily.
- B. Over 50% of those surveyed do not exercise daily.
- C. Less people in the 31–42 age group exercise daily than those in the 18–30 age group.
- D. More people in the 18-30 age group do not exercise daily than those in the 31-42 age group.

3. The principal surveyed students in 6th and 7th grade on whether they participated in the school fundraiser. The results of the survey are shown in the table below.

| | Yes | No |
|-----|-----|----|
| 6th | 79 | 44 |
| 7th | 69 | 83 |

Based on the table, which statement is true?

- A About 54% of the students participated in the fundraiser.
- B. About 79% of the 6th grade students participated in the fundraiser.
- C. More 7th grade students participated in the fundraiser than 6th grade students.
- D. Most students did not participate in the fundraiser.
- 4. Ann owns 2 ice cream shops. She asked customers in both shops whether they prefer vanilla, chocolate, or swirl ice cream. The results of her survey are in the table.

| | Vanilla | Chocolate | Swirl |
|---------------|---------|-----------|-------|
| Dreamery Shop | 12 | 16 | 22 |
| Oak St. Shop | 17 | 14 | 19 |

- A More customers prefer single flavors of ice cream over the Swirl ice cream.
- B. More customers prefer Vanilla ice cream than Chocolate.
- C. One-third of the customers prefer Chocolate ice cream.
- D. Over half of the customers prefer Swirl ice cream.

5. In the eighth grade there are two homerooms, Mr. Kelly's and Mrs. Smith's. The number of boys and girls in each of these homerooms are given in the table.

| | Boys | Girls |
|------------|------|-------|
| Mr. Kelly | 15 | 11 |
| Mrs. Smith | 10 | 14 |

Based on the table, which statement is true?

- A Mrs. Smith has more students in her homeroom.
- B. There are more boys than girls in the eighth grade.
- C. About 15% of the students in Mr. Kelly's homeroom are boys.
- D. There are the same number of boys and girls in the eighth grade.
- 6. A survey of several adults was conducted to find out the number of males and females that enjoy running.

| | Male | Female |
|----------------------|------|--------|
| Do not enjoy running | 121 | 55 |
| Enjoy running | 20 | 11 |

Based on the table, *approximately* what percentage of those surveyed are male and enjoy running?

- A 10%
- B. 12%
- c. 20%
- D. 58%

7. In a survey, 200 people were asked if they had a computer and a newspaper subscription. The results are shown in the table below.

| | Computer | No Computer |
|------------------------------|----------|-------------|
| Newspaper Subscription | 35 | 42 |
| No Newspaper Subscription | 108 | 15 |

How many people do not have a newspaper subscription?

- A 15
- B. **57**
- c. 108
- D. 123
- 8. Students at a school were surveyed about their favorite cafeteria meal. The results are shown in the table below.

| | Turkey Sandwich | Pizza | Chicken |
|-----------|--------------------|-------|---------|
| 6th Grade | 45 | 69 | 48 |
| 7th Grade | 33 | 142 | 37 |
| 8th Grade | 42 | 128 | 45 |

Based on the table, how many students prefer Chicken and Turkey Sandwich?

- A 120
- B. 130
- c. 250
- D. 339

9. A survey was conducted in the 7th and 8th grade to determine students' preference for pizza toppings. The results are shown in the table.

| | Cheese | Pepperoni | Sausage |
|-----------|--------|-----------|---------|
| 7th Grade | 42 | 29 | 9 |
| 8th Grade | 31 | 36 | 13 |

Based on the table, which statement is true?

- A Over 40% of the students prefer Pepperoni.
- B. About 22% of the students prefer Sausage.
- C. More than half of the students prefer Cheese.
- D. More students prefer Cheese than prefer Pepperoni and Sausage combined.
- ^{10.} A company counted the number of people who visited a restaurant over several days.

| | Weekday | Weekend |
|-------|---------|---------|
| Child | 221 | 187 |
| Adult | 179 | 148 |

- A More children than adults visited the restaurant.
- B. Over half of the total people that visited the restaurant were adults.
- C. More people visited the restaurant on the weekend than during the week.
- D. About 45% of the people that visited the restaurant on the weekend were children.

^{11.} A company surveyed 200 adults, asking if they exercise daily and how well they sleep at night. The responses are in the table below.

| | Sleeps Well | Does not Sleep Well |
|-------------------------------|-------------|------------------------|
| Exercises Daily | 88 | 24 |
| Does not Exercise Daily | 32 | 56 |

What percentage of the people surveyed exercise daily?

- A 44%
- B. 56%
- c. 88%
- 12. Students in 8th grade were asked which type of candy they prefer. The results are shown in the table below.

| | Chocolate | Mint | Orange |
|--------|-----------|------|--------|
| Male | 34 | 35 | 36 |
| Female | 38 | 27 | 35 |

- A About 30% of the students prefer Mint.
- B. About 50% of the students prefer Orange.
- C. About 20% of the students prefer Orange.
- D. About 40% of the students prefer Chocolate.

13. The 8th-grade students at a middle school were surveyed to see which high school they will attend in the fall. The results are shown in the table below.

| | North Hill | Easterly | Southern |
|-------|------------|----------|----------|
| Girls | 99 | 63 | 71 |
| Boys | 110 | 72 | 53 |

Based on the table above, which statement is true?

- A Over half of the students will attend North Hill.
- B. Over one-third of the students will attend Easterly.
- C. About 25% of the boys will attend North Hill.
- D. About 30% of the girls will attend Southern.
- 14. Students at a school were surveyed to see how many hours per day they play video games. The results are shown in the table below.

| | Less Than 1 Hour | 1-3 Hours | More Than 3 Hours |
|-----------|------------------|-----------|-------------------|
| 6th Grade | 40 | 62 | 97 |
| 7th Grade | 53 | 78 | 18 |
| 8th Grade | 38 | 91 | 31 |

- A Most students play more than 3 hours of video games per day.
- B. Over 50% of students play 1-3 hours of video games per week.
- C. More students play 1–3 hours of video games each day than any other amount of time.
- D. More students play less than 1 hour of video games per day than any other amount of time.

^{15.} A survey was conducted to determine the number of males and females registered as Democrat, Independent, or Republican. The results are shown in the table below.

| | Democrat | Independent | Republican |
|---------|----------|-------------|------------|
| Females | 325 | 81 | 270 |
| Males | 254 | 41 | 285 |

Based on the table, *approximately* what percentage of those surveyed are male Republicans?

- A 3%
- B. 20%
- c. 23%
- D. 26%
- ^{16.} Jasmine asked students if they have a job after school. Their responses are in the table below.

| | Have a Job | Does Not Have a Job |
|-------|------------|------------------------|
| Boys | 22 | 68 |
| Girls | 38 | 54 |

Based on the table, **about** what percent of the students have a job after school?

- A 33%
- B. 52%
- c. 60%

17. Mr. Williams asked his students how long they studied for their last test. The responses are in the table below.

| | 1 hour or more | Less than 1 hour |
|-------|-------------------|---------------------|
| Boys | 29 | 31 |
| Girls | 36 | 24 |

Based on the table, **about** what percentage of the students studied 1 hour or more for the test?

- A 50%
- B. 54%
- c. 65%
- ^{18.} Natalie asked students in her school if they had taken a foreign language class. The responses are in the table below.

| | Taken a Foreign Language | Not Taken a Foreign Language |
|-------|--------------------------------|------------------------------------|
| Boys | 27 | 13 |
| Girls | 33 | 7 |

- A More boys than girls have taken a foreign language class.
- B. 60% of the students have taken a foreign language class.
- c. 25% of the students have not taken a foreign language class.

^{19.} A survey was conducted by an automotive club about the type of vehicles that people prefer. The results are shown in the table.

| | Car | Truck | SUV |
|---------|-----|-------|-----|
| Males | 34 | 45 | 36 |
| Females | 37 | 36 | 48 |

Based on the table, which statement is true?

- A Over 50% of males prefer an SUV.
- B. Males prefer cars rather than trucks.
- C. More females participated in the survey than males.
- D. More than 45% of those who participated in the survey prefer SUVs.

^{20.} Students in 7th and 8th grade were asked their favorite sport. The results of this survey are shown in the table.

| | Baseball | Soccer | Basketball | Football |
|-----------|----------|--------|------------|----------|
| 7th Grade | 12 | 14 | 8 | 25 |
| 8th Grade | 8 | 12 | 6 | 15 |

Based on the table, which statement is true?

- A Over half of the 7th grade students preferred football.
- B. More students preferred basketball than baseball.
- C. About 50% of each grade level preferred soccer.
- D. Over a third of the 8th graders preferred football.

NAMSCM811314SP.4 Page 11 of 22

Schoolnet.

^{21.} A company asked 250 customers which topping they liked most on their pizza. The responses are shown in the table below.

| | Pepperoni | Sausage | Extra Cheese |
|---------|-----------|---------|-----------------|
| Males | 61 | 29 | 39 |
| Females | 49 | 34 | 38 |

Based on the responses, which statement is true?

- A Over 50% of the customers liked pepperoni most.
- B. About 25% of the customers liked sausage most.
- C. More females than males liked extra cheese most.
- ^{22.} A survey was conducted to determine the type of footwear that people preferred to purchase. The results are presented in the table.

| | Sport Shoes | Boots | Sandals |
|---------|-------------|-------|---------|
| Males | 64 | 53 | 43 |
| Females | 59 | 56 | 65 |

Based on the survey results, which statement is true?

- A Over half of the males preferred boots.
- B. Over half of the females preferred sport shoes.
- C. More males preferred sandals than boots.
- D. More females preferred sandals than boots.

NAMSCM811314SP.4 Page

^{23.} A teacher at an elementary school surveyed 4th and 5th-grade students to determine how many minutes they exercise after school. The results of the survey are shown in the table below.

| | 0-30 Minutes | 31-60 Minutes | More Than 60 Minutes |
|-----------|-----------------|------------------|-------------------------|
| 4th Grade | 61 | 52 | 29 |
| 5th Grade | 74 | 23 | 16 |

About what percent of the students exercise More Than 60 Minutes?

- A 18%
- B. 21%
- c. 23%
- D. 45%

^{24.} A survey was conducted to determine the type of milk that students in 6th and 7th grades prefer. The results are shown in the table.

| | Regular Milk | Chocolate Milk | Strawberry Milk |
|-----------|--------------|----------------|-----------------|
| 6th Grade | 43 | 34 | 41 |
| 7th Grade | 35 | 42 | 38 |

- A More students prefer drinking regular milk than strawberry milk.
- B. More students prefer drinking regular milk than chocolate milk.
- C. More students prefer drinking chocolate milk than regular milk.
- D. More students prefer drinking chocolate milk than strawberry milk.

^{25.} A survey was conducted of middle school students to examine the relationship between sleep and the number of carbonated drinks consumed each day. The table shows the results of the data collected.

| | More than 4 drinks | Less than or equal to 4 drinks |
|----------------------------|-----------------------|--------------------------------|
| 8 hours or more of sleep | 130 | 186 |
| Less than 8 hours of sleep | 306 | 78 |

Based on the table, which statement is a valid conclusion?

- A About half of the students surveyed have less than 4 carbonated drinks per day.
- B. The more carbonated drinks a student consumes, the less sleep the student gets.
- C. The more sleep a student gets, the more carbonated drinks the student consumes.
- D. A student is twice as likely to sleep more than 8 hours if the student consumes more than 4 carbonated drinks.

^{26.} Students at a school were surveyed to find out if they do homework or other activities when they first get home from school. The results of the survey are in the table below.

| | Other Activities | Homework |
|-----------|---------------------|----------|
| 6th Grade | 59 | 102 |
| 7th Grade | 80 | 114 |
| 8th Grade | 108 | 76 |

Which statement below is true?

- A More students in 6th grade do homework first than students in 7th grade.
- B. More students in 7th grade do other activities first than students in 8th grade.
- C. More students in 6th and 7th grade do homework first than students in 8th grade.
- D. More students do other activities first than students who do homework first.

Page 14 of 22 schoolnet.

^{27.} The data below displays the answers from a survey given to students on their favorite color.

| Favorite Color | | | | | |
|---------------------------|----|----|----|---|---|
| Pink Blue Red Green Other | | | | | |
| Female | 12 | 9 | 8 | 7 | 4 |
| Male | 2 | 19 | 20 | 5 | 4 |

Using the data in the table, which statement is true?

- More than $\frac{1}{2}$ of the males surveyed chose Red or Green as their favorite color.
- B. More females chose Pink or Blue as their favorite color than males.
- C. More than 30% of the students surveyed chose Red as their favorite color.
- D. More than 50% of the students surveyed chose Red or Green as their favorite color.
- ^{28.} A survey was done at a school to determine how long boys and girls studied for a test. The results are shown in the table below.

| | Boys | Girls |
|----------------------|------|-------|
| 30 Minutes Or More | 100 | 88 |
| Less Than 30 Minutes | 88 | 44 |

- A Twice as many Girls as Boys study 30 minutes or more.
- B. Twice as many Girls as Boys study less than 30 minutes.
- C. Twice as many Boys as Girls study 30 minutes or more.
- D. Twice as many Boys as Girls study less than 30 minutes.

^{29.} A teacher surveyed the boys and girls in the 8th grade on the type of meal they would prefer for an end-of-year party. The results are listed below.

| | Chicken | Beef | Vegetarian |
|-------|---------|------|------------|
| Boys | 77 | 40 | 97 |
| Girls | 86 | 79 | 75 |

Which statement below accurately represents the data?

- A About 40% of the boys prefer a beef meal.
- B. About 50% of the girls prefer a chicken meal.
- C. About half of the students prefer a vegetarian meal.
- D. About the same percent of girls and boys prefer a chicken meal.
- ^{30.} A survey asked students at a middle school the number of siblings they have. The results are shown in the table below.

| | 0 Siblings | 1 Sibling | 2 Siblings | 3 or More Siblings |
|-----------|------------|-----------|------------|-----------------------|
| 6th Grade | 32 | 129 | 98 | 62 |
| 7th Grade | 47 | 92 | 108 | 58 |
| 8th Grade | 23 | 108 | 101 | 64 |

About what percent of the students had no siblings?

- A 4%
- B. 5%
- C. 11%
- D. 13%

31. Several students were asked if they liked or disliked broccoli. Their responses are in the table below.

| | Liked broccoli | Disliked broccoli |
|---------|----------------|-------------------|
| Males | 34 | 38 |
| Females | 23 | 35 |

Based on the table, which statement is true?

- About 47% of those surveyed are male and liked broccoli.
- About 18% of those surveyed are female and liked broccoli.
- About 40% of those surveyed are male and disliked broccoli.
- About 35% of those surveyed are female and disliked broccoli.

32. Three hundred students were surveyed to determine what they do after school. The results of the survey are shown in the table.

| | Video Games | Sports | Reading |
|---------|----------------|--------|---------|
| Males | 67 | 51 | 31 |
| Females | 47 | 53 | 51 |

Based on the table, which statement is true?

- More males than females play sports after school.
- More females than males play video games after school.
- More than twice as many females as males read after school.
- More than twice as many males play video games after school than read.

NAMSCM811314SP.4

^{33.} At a school, 200 students were asked whether they prefer apple juice or orange juice. The students' responses are in the table below.

| | Apple Juice | Orange Juice |
|-------|-------------|--------------|
| Girls | 55 | 45 |
| Boys | 40 | 60 |

Based on the survey results, which statement is true?

- A More students preferred apple juice than orange juice.
- B. More girls preferred orange juice than apple juice.
- C. More boys preferred orange juice than apple juice.
- ^{34.} The cafeteria manager of a school asked the 6th- and 7th-grade students which meat they preferred for lunch. The results of the survey are in the table below.

| | Chicken | Turkey |
|-----------|---------|--------|
| 6th grade | 30 | 62 |
| 7th grade | 42 | 34 |

- A More students preferred chicken than turkey.
- B. More 7th-grade students preferred chicken than turkey.
- C. More 6th-grade students preferred chicken than turkey.

^{35.} Students in seventh and eighth grade were asked whether they normally buy their lunch at school, bring their lunch to school, or sometimes buy and sometimes bring their lunch. The results of this survey are in the table.

| | Buy Lunch Only | Bring Lunch Only | Buy and Bring Lunch |
|----------------------|-------------------|---------------------|------------------------|
| Seventh Grade | 15 | 10 | 5 |
| Eighth Grade | 7 | 19 | 3 |

Based on the table, which statement is true?

- A Most students buy their lunch only.
- B. Less than 10% of the students buy and bring lunch.
- C. One-third of the students buy their lunch only.
- D. About half of the students bring their lunch only.
- ^{36.} A teacher asked a class which ice cream flavor and toppings they prefer. The results of the survey are shown in the table.

| | Hot Fudge | Caramel |
|------------|-----------|---------|
| Vanilla | 8 | 5 |
| Chocolate | 7 | 4 |
| Strawberry | 2 | 2 |

Based on the table, which combination did 25% of the students prefer?

- A vanilla and hot fudge
- B. chocolate and hot fudge
- C. vanilla and caramel
- D. strawberry and caramel

NAMSCM811314SP.4
Page

^{37.} The 7th and 8th grade students at a school were surveyed to determine their favorite lunch. The table below shows the results of the survey.

| | Pizza | Salad | Hamburgers |
|-----------|-------|-------|------------|
| 7th Grade | 62 | 41 | 18 |
| 8th Grade | 47 | 71 | 26 |

Based on the table, which statement is true?

- A More 8th-graders than 7th-graders chose Pizza as their favorite lunch.
- B. Over half of the students chose Salad as their favorite lunch.
- C. About 20% of 7th-grade students chose Hamburgers as their favorite lunch.
- D. Three more students chose Salad as their favorite lunch than chose Pizza.

^{38.} All the students in 7th and 8th grade were asked what was their favorite subject. The results are listed in the table.

| | Math | Reading | Science | Social Studies |
|-----|------|---------|---------|-------------------|
| 7th | 20 | 26 | 41 | 60 |
| 8th | 32 | 15 | 38 | 42 |

Based on the table, which statement is true?

- A 60% of the 7th graders prefer social studies.
- B. Most students in the 8th grade prefer science.
- C. More 8th graders prefer social studies over science.
- D. Over half of the 7th grade students prefer social studies.

NAMSCM811314SP.4 Page 20

^{39.} A teacher asked 75 students which lunch served in the cafeteria was their favorite. The responses are shown below.

| | Pizza | Cheeseburgers | Tacos |
|-------|-------|---------------|-------|
| Girls | 10 | 10 | 15 |
| Boys | 15 | 10 | 15 |

Based on the table, which statement is true?

- A More students chose pizza than cheeseburgers.
- B. More students chose pizza than tacos.
- C. More girls than boys chose tacos.

^{40.} Mike asked 80 students at his school which sport they liked best. The students' responses are shown in the table below.

| | Football | Basketball | Tennis |
|-------|----------|------------|--------|
| Boys | 18 | 15 | 10 |
| Girls | 10 | 12 | 15 |

What percentage of the students chose football?

- A 28%
- в. 35%
- c. 54%

41. The owner of a local ice cream shop asked customers what ice cream flavor they preferred. The customers' responses are in the table below.

| | Chocolate | Vanilla | Strawberry |
|----------|-----------|---------|------------|
| Children | 14 | 13 | 3 |
| Adults | 8 | 16 | 6 |

Based on the table, which statement is true?

- A More customers preferred vanilla than chocolate.
- B. More children than adults preferred strawberry.
- C. More adults than children preferred chocolate.

NAMSCM811314SP.4

Page 22