Leslie ran four 100-meter races in March. Leslie's times were 10.3 seconds, 10.329 seconds, 10.29 seconds, and 10.289 seconds. What is the order of the times from the least amount of time to the greatest amount of time?

A $10.29,10.3,10.289,10.329$
B $10.29,10.289,10.3,10.329$
C $10.289,10.29,10.3,10.329$
D $10.289,10.29,10.329,10.3$

2 The diagram below shows four measurements of the same liquid substance.


Which measurement is most precise?
A about 1 liter
B 10 deciliters
C 98 centiliters
D 985 milliliters

3
Brian can order one of 3 flavors of ice cream at an ice cream shop. He can order either a small serving or a large serving. What is the total number of different combinations of ice cream flavor and serving size that Brian can order at the ice cream shop?

A 2
B 3
C 5
D 6

Maggie created a number pattern. The table below shows some of the terms in the pattern Maggie created.

Maggie's Pattern

| Term <br> Number | Pattern <br> Number |
| :---: | :---: |
| 1 | 1 |
| 2 | 4 |
| 3 | 9 |
| 4 | 16 |
| 5 | $?$ |
| 6 | 36 |
| 7 | 49 |

What is the missing number in Maggie's pattern?

A 21
B 25
C 32
D 35

5 Several points are graphed on the coordinate grid below.


Which point is located at $(6,7)$ ?
A point $S$
B point $T$
C point $V$
D point $W$

6 Susan had a piece of wood 10 meters (m) long. She cut the wood into 4 segments. The first segment was 1.7 m long. The second segment was 2.35 m long. The third segment was 3.17 m long. What was the length of the fourth segment of wood?

A 2.78 m
B 2.88 m
C 4.31 m
D 7.22 m

7 A dump truck will hold 3 tons of dirt. A standard pick-up truck will hold 1,500 pounds of dirt. How many standard pick-up trucks are needed to hold as much dirt as one dump truck? (1 ton $=2,000$ pounds)

A 1 truck
B 3 trucks
C 4 trucks
D 5 trucks

8 Gloria created a number pattern using the rule $y=2 x+5$. The table below shows some numbers in the pattern.

| $x$ | $y$ |
| ---: | :---: |
| 4 | 13 |
| 7 | 19 |
| 10 | 25 |
| 13 | $?$ |

What is the value of $y$ when $x=13$ ?
A 31
B 34
C 37
D 40

9 Find the location of the four fractions on the number line below.


What is the order of the fractions from least to greatest?
A $\frac{7}{10} \quad \frac{3}{4} \quad \frac{2}{3} \quad \frac{3}{5}$
B $\quad \frac{3}{5} \quad \frac{2}{3} \quad \frac{7}{10} \quad \frac{3}{4}$
$\begin{array}{lllll}\text { C } & \frac{2}{3} & \frac{3}{4} & \frac{7}{10} & \frac{3}{5}\end{array}$
D $\frac{3}{5} \quad \frac{3}{4} \quad \frac{7}{10} \quad \frac{2}{3}$

Write your answer to Question 10 on a separate sheet of paper. Be sure to answer Parts A and B.

10
Jill is buying a shirt. The shirt style will be either solid or striped. Both styles are available in red, purple, and blue.

A Create a list or a diagram that shows all of the possible combinations of shirt style and shirt color that Jill could buy.

B Jill randomly selects one of the possible shirt combinations. What is the probability that the shirt Jill selects is red or blue? Explain your thinking.

11
The circle graph below shows the approximate percent of U.S. presidents in different age groups when they first served as president, from 1789 to 2001.

> Percent of U.S. Presidents
> in Different Age Groups When First Serving as President, 1789 to 2001


What is the approximate percent of U.S. presidents who were between the ages of 50 and 59 years old when they first served as president?

A $25 \%$
B $30 \%$
C $43 \%$
D $58 \%$

Joe used a rule and numbers from -2 to 3 to create the ordered pairs graphed on the coordinate plane below.


Which shows the rule Joe could have used and three ordered pairs Joe created using the rule?
A $\quad x-1=y$

| $x$ | $y$ |
| ---: | ---: |
| 1 | 0 |
| -1 | -2 |
| 2 | 1 |

C $\quad 1-x=y$

| $\boldsymbol{x}$ | $\boldsymbol{y}$ |
| ---: | ---: |
| 1 | 0 |
| -1 | 2 |
| 2 | -1 |

B $\quad x+1=y$

| $\boldsymbol{x}$ | $\boldsymbol{y}$ |
| ---: | ---: |
| 1 | 2 |
| -1 | 0 |
| 2 | 3 |

D $\quad x=y$

| $\boldsymbol{x}$ | $\boldsymbol{y}$ |
| ---: | ---: |
| 1 | 1 |
| -1 | -1 |
| 2 | 2 |

Cotton fabric: 2.14 yards
Wool fabric: $\mathbf{3 . 8 2}$ yards
Silk fabric: $\mathbf{1 . 7 9}$ yards

Which is the best ESTIMATE of the total number of yards of fabric Lily bought?

A 6 yards
B 7 yards
C 8 yards
D 9 yards

The diagram below shows a ratio of shaded to unshaded boxes.


Which diagram shows the same ratio of shaded to unshaded boxes?

A


B


C


D


15
Cody collects key chains. He has one key chain from each state and country listed below.

State Key Chains

| Texas | California |
| :--- | :--- |
| Indiana | Alabama |
| Nevada | Kentucky |
| Illinois | Arizona |

## Country Key Chains

United States
Mexico
Italy
Australia

Which conclusion about the number of key chains in Cody's collection is true?

A Cody has twice as many state key chains as country key chains.
B Cody has twice as many country key chains as state key chains.
C Cody has three times as many state key chains as country key chains.
D Cody has three times as many country key chains as state key chains.

16
Which set contains only multiples of 8 ?
A $\{1,8,16,24\}$
B $\{1,8,16,28\}$
C $\{8,16,24,32\}$
D $\{8,16,28,36\}$


Coach Brown puts her players on samesized teams for practice drills. The chart below shows different ways Coach Brown could put all her players on practice teams.

Practice Team Sizes

| Number of <br> Practice Teams | Number of <br> Players on Each <br> Practice Team |
| :---: | :---: |
| 3 | 12 |
| 6 | 6 |
| 12 | 3 |
| 18 | 2 |

Which describes another way Coach Brown could make same-sized practice teams using all of her players?

A 4 practice teams with 9 players on each practice team
B 5 practice teams with 5 players on each practice team
C 7 practice teams with 5 players on each practice team
D 8 practice teams with 4 players on each practice team

18 The arrow on the spinner shown below will be spun 400 times.


Based on theoretical probability, which graph best represents the number of spins, in 400 spins, that the arrow will stop in each color section?
A
Theoretical Results
C Theoretical Results

Section Color
B
Theoretical Results

D
Theoretical Results


What is the sum of the measures of the interior angles in a trapezoid?

A $720^{\circ}$
B $360^{\circ}$
C $180^{\circ}$
D $90^{\circ}$

20
Jesse is 5 years older than Kim. Which table shows the relationship between Jesse's age $(j)$ and Kim's age $(k)$ ?

A

| $\boldsymbol{j}$ | $\boldsymbol{k}$ |
| ---: | ---: |
| 6 | 11 |
| 8 | 13 |
| 10 | 15 |
| 12 | 17 |

B

| $\boldsymbol{j}$ | $\boldsymbol{k}$ |
| :---: | :---: |
| 4 | 1 |
| 3 | 2 |
| 2 | 3 |
| 1 | 4 |

C

| $\boldsymbol{j}$ | $\boldsymbol{k}$ |
| :---: | ---: |
| 10 | 5 |
| 15 | 7 |
| 20 | 9 |
| 25 | 11 |

D

| $\boldsymbol{j}$ | $\boldsymbol{k}$ |
| ---: | ---: |
| 18 | 13 |
| 15 | 10 |
| 9 | 4 |
| 6 | 1 |

The large square below is divided into equal-sized smaller squares.


What fraction of the large square is shaded?
A $\frac{3}{4}$
B $\frac{7}{10}$
C $\frac{1}{4}$
D $\frac{1}{5}$

A sandwich shop offers a selection of bread, meat, and cheese for its sandwiches, as shown in the table below.

Sandwich Shop Selections

| Bread | Wheat |
| :--- | :--- |
|  | White |
| Meat | Beef |
|  | Chicken |
| Cheese | American |
|  | Swiss |

The diagram below represents all the different sandwich combinations that can be made using the bread, meat, and cheese selections the sandwich shop offers.


Based on the diagram, what is the probability that a randomly selected sandwich will be a chicken sandwich with American cheese on wheat bread?

A 1 out of 3
B 1 out of 6
C 1 out of 8
D 1 out of 16

23
The diameter of a circular mirror is 10 inches (in), as shown below.


Bonnie wraps a piece of ribbon once around the outer edge of the mirror. What is the length of the ribbon? (Use $\pi=3.14$ )

A 15.7 in
B 31.4 in
C 62.8 in
D 78.5 in

24
A rectangle has a length of 20 cm and a width of 15 cm . Which statement explains why the rectangle is not a rhombus?

A A rhombus has four sides that are the same length.
B A rhombus has four angles that have equal measures.
C A rhombus has exactly two sides that are parallel.
D A rhombus has exactly two right angles.

25
Paul used a rule to create the pattern shown in the chart below.

| $\boldsymbol{n}$ | 10 | 17 | 24 | 30 |
| :---: | :---: | :---: | :---: | :---: |
| $\boldsymbol{m}$ | 6 | 13 | 20 | 26 |

Which rule could Paul have used to determine each value of $m$ in the pattern?

A $n+4$
B $n-4$
C $n+7$
D $n-7$

26
Ben wrestles for his school team and wants to increase his weight by $10 \%$. His current weight is 140 pounds. How much weight does Ben want to gain?

A 0.10 pound
B 1.4 pounds
C 10 pounds
D 14 pounds

27
Alex collected classmates' responses to her survey question, "What is your favorite sport?" She asked her question at the beginning, middle, and end of the school year to find out if her classmates changed their responses depending on the season. Which type of display would best represent Alex's data?

A three line plots-one for each time of the year she asks the question
B a pictograph with all the data combined
C three circle graphs-one for each time of the year she asks the question
D a stem-and-leaf plot for each sport her classmates name

28 Which quadrilateral has vertices located at $(5,-5),(2,9),(-8,6)$, and $(-8,-9)$ ?





29 The pictograph below shows the number of students in Ms. Krane's class who ate at least one apple each day last week.

Number of Ms. Krane's Students Who Ate Apples

| Monday |  |
| :--- | :--- |
| Tuesday |  |
| Wednesday |  |
| Thursday |  |
| Friday |  |


| Key |
| :---: |
| $\mathrm{O}=2$ students |

Based on the pictograph, how many students in Ms. Krane's class ate at least one apple last Thursday?

A 3 students
B 4 students
C 6 students
D 7 students

Write your answer to Question 30 on a separate sheet of paper. Be sure to answer Parts A and B.

30
For field trips, Principal Garcia always assigns 2 teachers to be in charge of every 15 students.
A Copy the table below on your answer sheet.

| Number of Students | 15 | 30 | 45 | 90 | 150 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of Teachers | 2 |  |  |  |  |

Complete the table to show the number of teachers that Principal Garcia needs to assign for field trips with the different numbers of students shown. Show your work.

B Principal Garcia assigned 16 teachers to be in charge of the students on the last field trip. What is the greatest number of students that went on the last field trip? Show your work.

## 31

Which number is divisible by 2,3 , and 9 ?
A 24
B 56
C 72
D 99

## 32

The rectangle below represents the floor of Sarah's bedroom.


What is the perimeter of Sarah's bedroom floor?

A 25 feet
B 50 feet
C 150 feet
D 250 feet

Shorewood School has two sixth-grade classes. One class has 15 girls and 9 boys. The second class has 6 girls and 18 boys. Each day, a sixth-grader is randomly selected to read the school announcements. What is the probability that a sixth-grade girl is selected to read the announcements on the first day of school?
A $\frac{21}{24}$
B $\frac{21}{27}$
C $\frac{21}{42}$
D $\frac{21}{48}$

34 Gera made the bar graph below to show the lengths of five rivers.


Based on the bar graph, which statement is true?
A The combined length of the Mississippi River and the Missouri River is greater than the combined length of the other three rivers.
B The difference between the lengths of the longest river and the shortest river is greater than the length of the Arkansas River.
C All of the rivers flow from the north to the south.
D The Mississippi River is the deepest river.

## 35

Angle $P$ is shown below.


Which angle is supplementary to angle $P$ ?


B


C


D


36 Ted graphed the four points shown on the coordinate plane below.


Which point did Ted graph at $(-3,0)$ ?
A point $G$
B point $H$
C point $J$
D point $K$

37
During a fundraiser, the 6th graders at Elks Middle School had collected $\$ 25.49$. Then John found 2 dimes and 5 quarters on the playground. He included the coins with the money the 6th graders had collected. What is the total amount of money the 6 th graders collected, including the coins John found?

A $\$ 26.94$
B \$26.84
C $\$ 26.76$
D $\$ 25.56$

The shaded area of the diagram below is a scale drawing of an outdoor play area.


$$
\begin{array}{|c|}
\hline \text { Scale } \\
\hline \sqcup=3 \text { meters } \\
\hline
\end{array}
$$

What is the least amount of fencing needed to completely surround the actual play area?

A 24 meters
B 26 meters
C 72 meters
D 78 meters

39
Rona used a rule to find the three ordered pairs shown in the table below.

| $\boldsymbol{x}$ | $\boldsymbol{y}$ |
| :---: | :---: |
| 0 | 3 |
| -1 | 5 |
| 2 | -1 |

Six points are graphed on the coordinate plane below.


Which three points graphed on the coordinate plane show the locations of the three ordered pairs in the table?

A points $L, M$, and $N$
B points $M, N$, and $P$
C points $N, P$, and $T$
D points $L, M$, and $R$

What is 5.0914 rounded to the nearest thousandth?

A 5.090
B 5.091
C 5.092
D 5.100

