

Grade 4
Released Items

4N2

Number Operations and Concepts - Understand ways to represent numbers, relationships among numbers, and number systems

The land areas in square miles of some states are listed in the chart below.

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Land Area

State	Area (sq mi)
Colorado	167,532
Idaho	134,499
Nebraska	124,495
Utah	136,639
Wyoming	157,422

Which list shows the states arranged in order from the greatest to the least land area?

- A . Nebraska, Idaho, Utah, Wyoming, Colorado
- B . Nebraska, Utah, Colorado, Idaho, Wyoming
- C . Colorado, Idaho, Nebraska, Utah, Wyoming
- D . Colorado, Wyoming, Utah, Idaho, Nebraska

4N3

Number Operations and Concepts - Develop the connection between conceptual understanding and computational proficiency

Ms. Kale has 26 students in her class. Each of her students made 12 bookmarks. Which is the closest estimate to the total number of bookmarks Ms. Kale's students made?

A $20 + 10$

B 30×10

C $20 - 10$

D 30×20

4G1

Geometry - Specify locations and describe spatial relationships using coordinate geometry and other representational systems

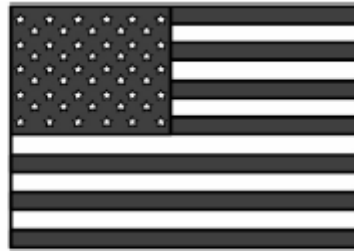
Which of these does not have a set of parallel lines?

341743

A.



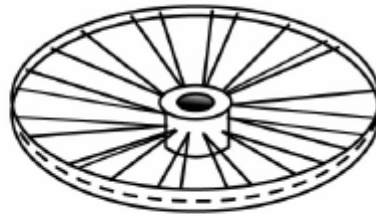
C.



B.



D.



4G2

Geometry - Analyze characteristics and properties of two- and three-dimensional geometric shapes

Which figure below does not have the same number of vertices as the others? Show or explain how you got your answer.





Figure A	Figure B	Figure C	Figure D
			

Figure: _____

4G3

Geometry - Apply transformations and use symmetry to analyze mathematical situations

Jake drew shapes in his notebook, as shown below. He asked Reese to point out which figure represents a reflection (flip).

1737

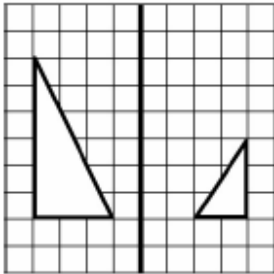


Figure A

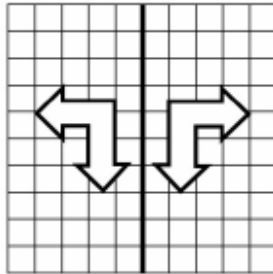


Figure B

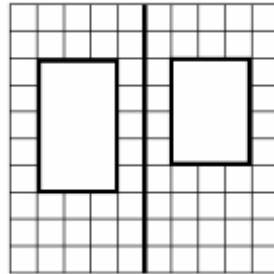


Figure C

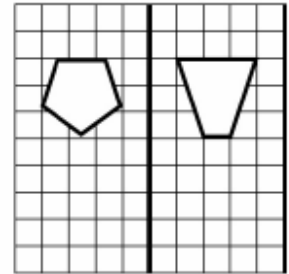


Figure D

Which figure should Reese point out to correctly represent a reflection (flip)?

- A . Figure A
- B . Figure B
- C . Figure C
- D . Figure D

4M1

Measurement - Understand measurable attributes of objects and the units, systems, and processes of measurement

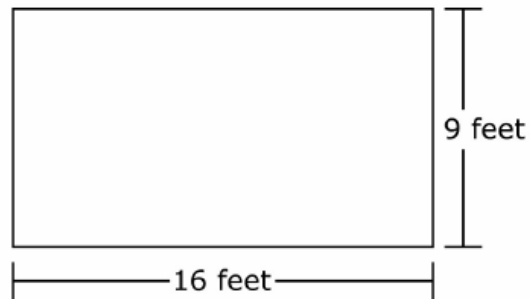
Jamie spent 67 minutes playing outside. Which of the following is equal to 67 minutes?

- A 1 hour 7 minutes**
- B 6 hours 7 minutes**
- C 7 hours 6 minutes**
- D 60 hours 7 minutes**

4M2

Measurement - Apply appropriate techniques, tools, and formulas to determine perimeter, area or volume

The Rico family is building a game room. The floor of the game room has the shape of a rectangle. The diagram below shows the dimensions of the game-room floor.



What is the area of the game-room floor in square feet?

- A 25 sq ft
- B 50 sq ft
- C 144 sq ft
- D 146 sq ft

4A1

Algebra - Understand patterns, relations, and functions

Ray drew a pattern that repeats after every 4th picture, as shown below.



Which of these shows the next 3 pictures in the correct order?

A



C



B



D



Michael wrote the number pattern shown. He began his pattern with the number 9.

The difference between the first number and second number is 3. The difference between the second number and third number is 4.

Pattern: 9, 12, 16, 21, 27, 34, 42, _____, _____
Rule: $\begin{array}{cccccc} \swarrow & \swarrow & \swarrow & \swarrow & \swarrow & \swarrow \\ +3 & +4 & +5 & +6 & +7 & +8 \end{array}$

The difference between the numbers will continue to increase by 1. What will be the next two numbers in Michael's pattern? Write your answer in the spaces provided. Show or explain how you figured out your answer.

Next 2 Numbers in Michael's Pattern: _____, _____

Pablo made a pattern by drawing rows of circles on a piece of paper. The table below lists the number of circles he drew in each row.

Pablo's Circles

Row	1	2	3	4	5	6	7
Number of Circles	3	6	12	24	48	96	?

Part A. What is the rule Pablo used to determine the number of circles in each row? Show or explain how you got your answer.

Rule: _____

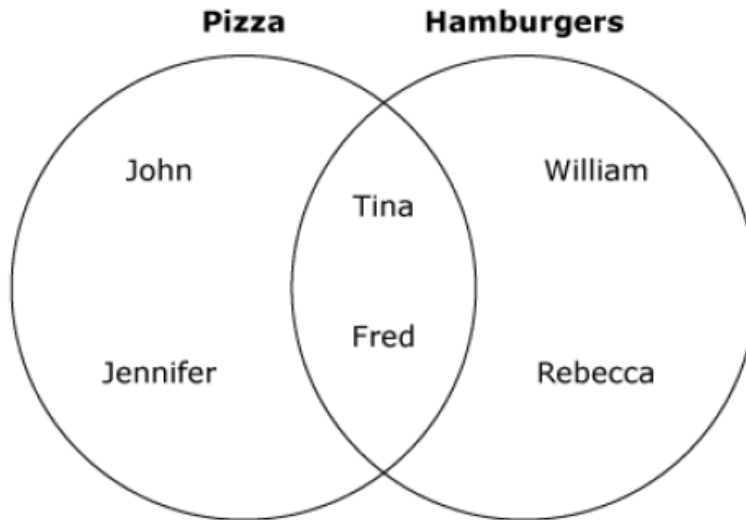
Part B. If the pattern continues as shown, what would be the number of circles in Row 7? Show or explain how you got your answer.

Number of Circles in Row 7: _____

4D1

Data Analysis and Probability - Collect, organize, and display relevant data to answer questions and use appropriate statistical methods to analyze the data

Hector asked 6 friends whether they enjoy eating pizza or hamburgers. The results are shown in the diagram below.



Which friends enjoy eating hamburgers but not pizza?

- A Rebecca and William
- B Tina and Fred
- C John, Jennifer, Tina, and Fred
- D Tina, Fred, William, and Rebecca

4D2

Data Analysis and Probability - Develop and evaluate inferences and predictions that are based on data

Sally has a paper bag with three candies that are each wrapped in a different colored foil.

- 395
- One candy is wrapped in gold foil.
 - One candy is wrapped in black foil.
 - One candy is wrapped in orange foil.

What is the likelihood Sally will pick a candy wrapped in red foil?

- A . Impossible
- B . Not likely
- C . Very likely
- D . Certain