GAGr. 5 EOG Math Practice Test 1 - Question Set | 53 Questions | 58 Points

1

Debbie bought 4 boxes of black pens and 6 boxes of red pens. Each box has 8 pens in it. Which expression could Debbie use to find the total number of pens she bought?

- \bigcirc A. $(8 \times 6) + 4$
- O B. (8 × 4) + 6
- \circ C. 8 + (4 × 6)
- O D. $8 \times (4 + 6)$

Item #39483

2

If one stapler weighs 2.5 pounds, about how much would a box of 100 staplers weigh?

- A. 0.25 pound
- B. 2.50 pounds
- C C. 25 pounds
- C D. 250 pounds

3/4 - 5/12 =







O D. 1/2

Item #99829

4

Lana's hair is 26 centimeters long. Which is another way to describe the length of Lana's hair?

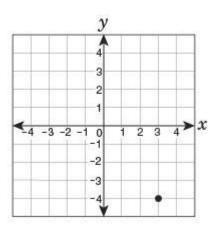
- A. 0.026 kilometers
- B. 2,600 millimeters
- C C. 2.6 meters
- D. 260 millimeters

Item #28849

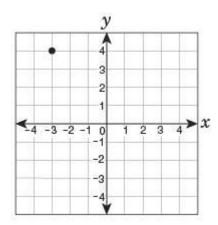
5

In which graph is the point (-4, 3) plotted?

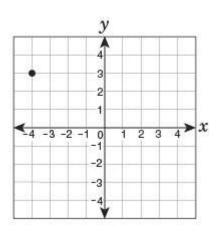
O A.



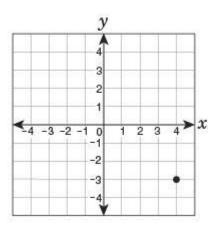
C B.



O C.



O D.



Item #42041

6

Vanessa took a survey at school. She found out that $\frac{2}{3}$ of the students in her class have pets. If 12 students in her class have pets, how many students are in Vanessa's class?

- A. 15
- C B. 18
- C. 21
- O D. 23

What is 7.658 rounded to the nearest hundredth?

- C A. 7.7
- © B. 7.65
- C. 7.66
- O D. 8

Item #17682

8

Mr. Hammond's class is building bridges with toothpicks and glue. Mr. Hammond has 3 bottles of glue for the class. The class has 11 groups. What fraction of a bottle of glue can each group use?

- \bigcirc A. $\frac{1}{33}$
- O B. 1/13
- C. 3
- O D. $\frac{11}{3}$

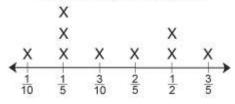
Item #34684

9

Richard mowed some lawns to earn extra money. The number of gallons of gas his lawn mower used for each lawn is shown.

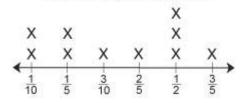
Which line plot shows the data?

A. Gas Used by Lawn Mower



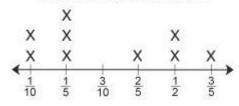
Number of Gallons

C B. Gas Used by Lawn Mower



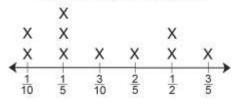
Number of Gallons

C C. Gas Used by Lawn Mower



Number of Gallons

C D. Gas Used by Lawn Mower



Number of Gallons

Gabriela has drawn a quadrilateral with four equal sides and four equal angles. Which of the following terms should she use to describe this exact shape?

- A. Square
- B. Rhombus
- C. Parallelogram
- D. All of the above

Item #6683

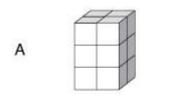
11

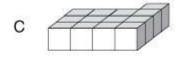
Each of a company's 546 employees earns \$790 each week. What is the total amount the company pays all its employees for 4 weeks?

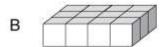
- C A. \$1,336
- © B. \$431,340
- C. \$1,725,360
- O D. \$2,588,040

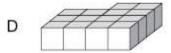
Which factor can be multiplied by 5 to give a number that is greater than 5?

- A. 0
- O B. 1
- \bigcirc C. $\frac{1}{2}$
- \bigcirc D. $\frac{7}{3}$









Each of the solid figures shown above is made up of unit cubes. Which figure has the greatest volume?

- C A. figure A
- C B. figure B
- C. figure C
- D. figure D

What is the quotient of 299 ÷ 23?

- O A. 10
- © B. 11
- C. 12
- O D. 13

Item #8363

15

Solve the equation below.

$$8 \div \frac{7}{2} = ____$$

- O A. 7
- B. 8/14
- C. 14/8
- O D. 16

What is the value of the expression below?

 $12 + 34 \times 4 + (89 \times 2)$

- C A. 239
- O B. 326
- C. 362
- O D. 546

Item #24223

17

What is the value of the expression below?

$$3 \times 10^5 + 4 \times 10^3 + 8 \times 10^2 + 1 \times 10^1$$

- C A. 3,481
- © B. 34,810
- C. 304,810
- C D. 3,000,481

Tyler's favorite roller coaster has a track length of $\frac{3}{5}$ mile. Cody's favorite roller coaster has a track length of $\frac{1}{2}$ mile. How much longer, in miles, is Tyler's favorite roller coaster than Cody's favorite roller coaster?

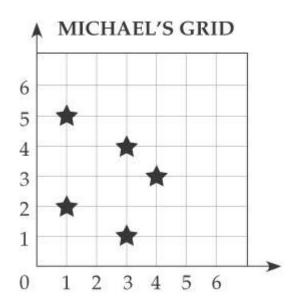
- \bigcirc A. $\frac{1}{10}$
- O B. $\frac{2}{3}$
- $C C. \frac{4}{7}$
- O D. $\frac{1}{5}$

Item #148009

19

Ms. Ayala caters large banquets and wedding receptions. Her punch recipe calls for 20 quarts of cranberry juice. She buys the juice in 1-gallon containers. How many 1-gallon containers does she need for the recipe?

- A. 3
- O B. 4
- C. 5
- O D. 6



Michael and Jessie are playing a game. If Jessie guesses one of the correct ordered pairs on Michael's grid, Michael loses the star located at that point. Michael's grid is shown above.

Which ordered pair should Jessie guess to make Michael lose a star?

- A. (1, 5)
- O B. (2, 1)
- C. (3, 2)
- O D. (5, 3)

Which pattern follows the rule "add 3 and multiply by 2"?

- C A. 2, 10, 23, 49, ...
- © B. 2, 12, 42, 132, ...
- C. 2, 5, 8, 11, ...
- D. 2, 10, 26, 58, ...

Item #2150

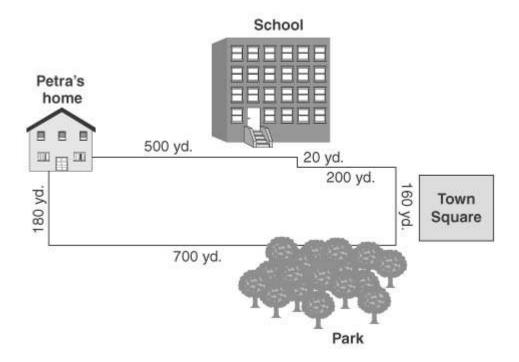
22

Which means "nine and eighty-one thousandths?"

- A. 981,000
- O B. 9.801
- C. 9.081
- O D. 0.981

Four people split $\frac{3}{4}$ of a pound of sunflower seeds. How many pounds of seeds does each person get?

- \bigcirc A. $\frac{3}{16}$ pounds
- C B. $\frac{1}{3}$ pounds
- C. 3 pounds
- \bigcirc D. $\frac{16}{3}$ pounds



Petra ran from her home to the town square, passing by her school. Then she ran back home, this time passing by the park. The figure above shows Petra's route. How many miles did Petra run altogether?

- C A. 1 mile
- B. 2 miles
- C. 3 miles
- D. 4 miles

Rosa drew a triangle with 3 congruent sides. How would you classify her triangle?

- C A. scalene triangle
- B. obtuse triangle
- C C. right triangle
- D. equilateral triangle

Item #59903

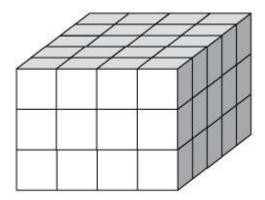
26

What is the missing number?

- C A. 415
- O B. 416
- C. 4,150
- O D. 4,160

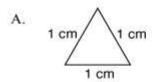
Without performing multiplication, determine which statement is true.

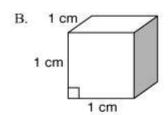
- C A. The product of 135×9 is $\frac{1}{3}$ as large as the product of 135×3 .
- \circ B. The product of 135 × 36 is 9 times as large as the product of 135 × 4.
- C. The product of 135×6 is 4 times as large as the product of 135×24 .
- C D. The product of 135×36 is $\frac{1}{6}$ times as large as the product of 135×9 .

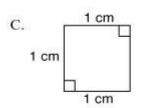


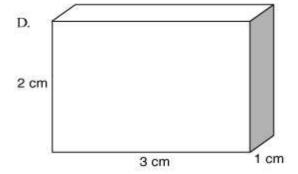
Nina made a prism out of blocks. What is the volume of Nina's prism?

- A. 12 cubic units
- C B. 23 cubic units
- C. 60 cubic units
- C D. 120 cubic units









Which figure has a volume of 1 cm³?

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

Which operation must be performed first in the expression below?

 $2 + (3 \times 5) \div 7$

- A. 2+3
- © B. 3×5
- C. 5÷7
- O D. 2+5

Item #77059

31

The number below is in written form. five hundred thirty-six and fifteen hundredths

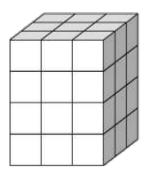
Which is the number in standard form?

- A. 53,615
- © B. 5,361.5
- C. 536.15
- D. 5,360.15

$$\frac{7}{8} + \frac{3}{4}$$

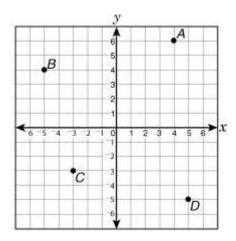
Evaluate.

- A. 1/8
- C B. 5/6
- C C. 1 1/6
- O D. 15/8



The model above is made with 1-cm cubes. What volume in cubic centimeters could be removed to change the model into a cube?

- A. 9
- C B. 12
- C. 18
- O D. 36



What point on the graph above has the coordinates (4, 6)?

- C A. Point A
- C B. Point B
- C C. Point C
- D. Point D

If m is Marty's age, then the expression 2m + 4 could represent Cindy's age if Cindy is which of the following?

- A. 4 years older than Marty
- B. twice Marty's age
- C. 4 years younger than twice Marty's age
- D. 4 years older than twice Marty's age

Item #45972

36

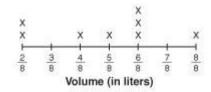
What is the value of the 3 in 5,734?

- A. 3
- © B. 30
- C. 300
- O D. 3,000

Rachel is making a bracelet and a necklace for her friend. She needs $\frac{1}{3}$ yard of wire to make a bracelet and $\frac{5}{6}$ yard of wire to make a necklace. She estimates that she will need about $\frac{6}{9}$ yards of wire. Which **best** explains her estimate?

- C A. Since $\frac{1}{3}$ plus $\frac{5}{6}$ is $\frac{6}{9}$, her estimate is reasonable.
- C B. Since $\frac{1}{3}$, $\frac{5}{6}$, and $\frac{6}{9}$ are all less than 1, her estimate is reasonable.
- C. Since $\frac{6}{9}$ is almost 1 and the fractions are less than 1, her estimate is too high.
- D. Since $\frac{2}{3}$ is less than $\frac{5}{6}$ and $\frac{5}{6}$ is one of the measurements she needs to add, her estimate is too low.

Gina measured the volumes of drinks in her refrigerator. She recorded her results in the line plot.



Which of the following is her data set?

- C A. Volume 1 2 3 4 5 6 7 8 8 (In liters)
- C C. Volume | 1/4 | 3/4 | 1/2 | 1/8 | 3/4 | 3/8 | 1/4 |
- C D. Volume $\frac{1}{4} \frac{3}{4} \frac{1}{2} \frac{1}{1} \frac{3}{8} \frac{3}{8} \frac{5}{8} \frac{1}{4}$

Which ordered pair shows a point with a *y* coordinate of 1 and an *x* coordinate of 3?

- A. (1, 3)
- B. (-1, 3)
- C. (3, 1)
- D. (3, −1)

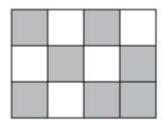
Input	Output
1	3
2	5
3	7
4	9

Look at the input-output table above. Which of the following describes the relationship between each pair of numbers?

- A. Multiply the input by 2. Then add 1 to find the output.
- C B. Multiply the input by 2. Then subtract 1 to find the output.
- C. Add 2 to the input to find the output.
- D. Add 4 to the input to find the output.

The moon takes 27.32166 days to orbit Earth. What is 27.32166 rounded to the nearest thousandth?

- A. 27.32
- O B. 27.321
- C C. 27.322
- O D. 27.3217



Which fraction describes the number of shaded squares out of the whole figure?

- \bigcirc A. $\frac{5}{7}$
- B. <u>5</u>
- C C. 7/12
- O D. 12/12

All quadrilaterals are closed and have four sides. All trapezoids are quadrilaterals.

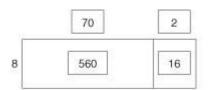
From this information, what do you know about trapezoids?

- A. All trapezoids are rectangles.
- B. All quadrilaterals are trapezoids.
- C. All trapezoids are closed and have four sides.
- C D. All trapezoids have one pair of parallel sides.

Item #36152

44

Which equation is represented by the area model?



- \bigcirc A. 560 ÷ 8 = 72
- O B. 576 ÷ 8 = 72
- \circ C. $72 \div 8 = 576$
- D. 56,016 ÷ 8 = 702

Pedro and his family drove 649 miles to get to a family reunion with 33 other family members. It took them 11 hours to get there. How many miles did Pedro's family drive per hour?

- A. 19 mph
- B. 44 mph
- C. 49 mph
- D. 59 mph

Item #3840

46

What is the value of $\frac{4}{5} \div 6$?

- \bigcirc A. $\frac{2}{20}$
- \bigcirc B. $\frac{4}{30}$
- C. 20
- O D. 24/5

Nate is helping clean up part of a park. His group finds and collects $\frac{7}{2}$ bags of trash per acre. The park is $\frac{5}{4}$ of an acre. How much trash do they collect in total?

- O A. 14
- \bigcirc B. $\frac{35}{8}$
- C. 30
- O D. 56/2

Item #14345

48

Find the number in which the value of the 6 is 100 times the value of the 6 in 23.65.

- C A. 91.486
- © B. 136.47
- C. 861.735
- O D. 1,602.43

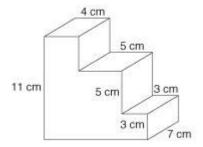


Grouped Item:

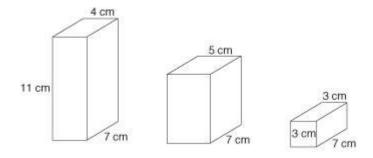
Q49

49 Part A

Layton wants to find the volume of this solid figure.



He breaks the solid into three rectangular prisms.



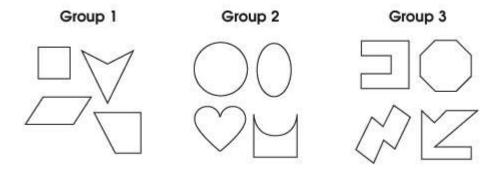
Which is the volume of the solid figure?

- A. 308 cm³
- B. 651 cm³
- C C. 756 cm³
- D. 924 cm³

49 Part B

What is a different way to find the volume of the solid in Part A? Explain your answer.

В	I	Ā	12	\$ d



The plane figures above have been sorted into three groups. Describe each group using mathematical language.



Passages/Stimuli

Plane Figures

Jermaine rode his bike 5.5 miles on Saturday and 6.7 miles on Sunday. He estimated that he rode a total of 13 miles throughout the weekend. Explain why his estimate is greater than or less than the actual sum. (2 points)



Passages/Stimuli Weekend Ride

Emily is making a braided necklace. She has four pieces of string that are each $10\frac{5}{8}$ inches long.

Emily needs a total of 45 inches of string for each necklace. Does she have enough string to make a necklace?

Emily can make a bracelet that uses $8\frac{1}{3}$ inches of string. Write and solve an equation that shows if she has enough string to make 4 bracelets.

