Do NOT Affix Student ID Label Here

A

Student Name _____

School Name _____

District Name/LEA _____

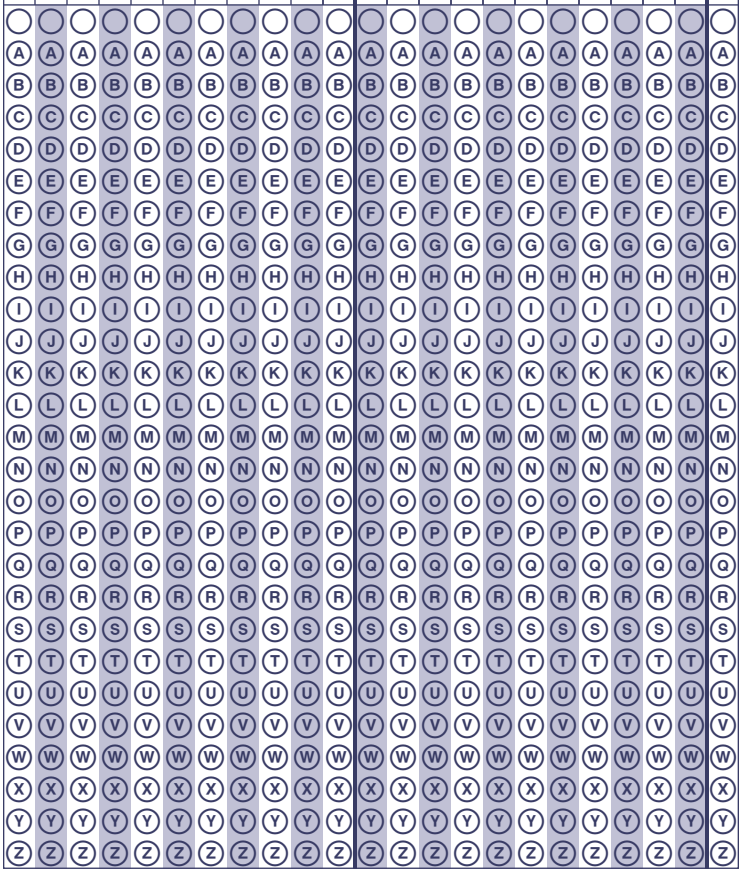
PARCC

Grade 6

Mathematics

End-of-Year Assessment Practice Test

B **Last Name** | **First Name** | **MI**



C

Place the Student ID Label Here

D **Gender**

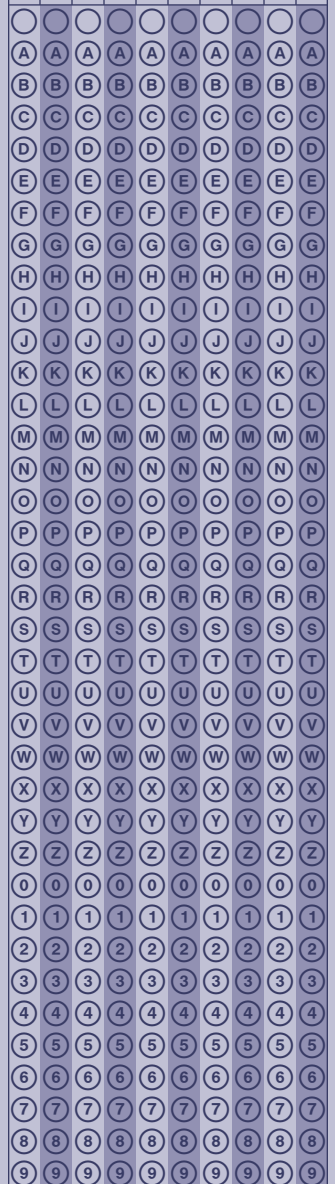
○ Female ○ Male

E **Date of Birth**

Day		Month	Year			
0	0	○ Jan		0	0	0
1	1	○ Feb	1		1	1
2	2	○ Mar	2		2	2
3	3	○ Apr			3	3
	4	○ May			4	4
	5	○ Jun			5	5
	6	○ Jul			6	6
	7	○ Aug			7	7
	8	○ Sep			8	8
	9	○ Oct		9	9	9
		○ Nov				
		○ Dec				

School Use Only

F **State Student Identifier**



Unit 1

Directions:

Today, you will be taking Unit 1 of the Grade 6 Mathematics End-of-Year Assessment Practice Test.

Read each question carefully. Some questions will ask you to choose one correct answer, while others will ask you to choose more than one correct answer. Mark your answers by filling in the circles in your test booklet for the answers you choose.

Do not make any stray marks on the test booklet. If you need to change an answer in your test booklet, be sure to erase your first answer completely.

Calculator Directions:

In the first section of this unit, you may not use a calculator. You will not be allowed to return to the non-calculator section of the test after you have started the calculator section of the test.

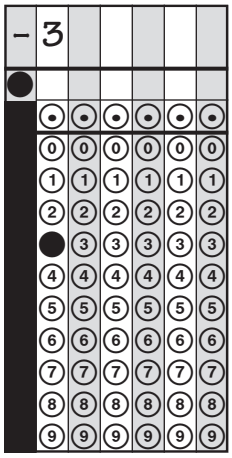
If you do not know the answer to a question, skip it and go on. If you finish the non-calculator section of Unit 1 early, you may review your answers and any questions you may have skipped in the non-calculator section ONLY.

Do NOT go on to the calculator section in Unit 1 until directed to do so.

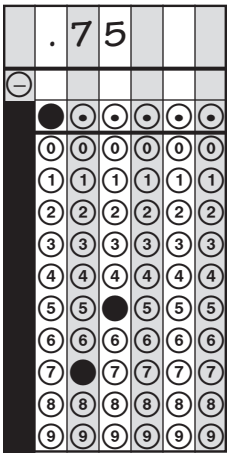
Directions for Completing the Answer Grids

1. Work the problem and find an answer.
2. Write your answer in the boxes at the top of the grid.
   - Print only one digit or symbol in each box. You may not need all the boxes to enter an answer, but do not leave a blank box in the middle of an answer.
3. Under each box in which you wrote your answer, fill in the bubble that matches the number or symbol you wrote above.
   - Fill in one and ONLY one bubble for each box. Do not fill in a bubble under an unused box.
   - Fill in each bubble by making a solid mark that completely fills the circle.
   - Fractions cannot be entered into an Answer Grid and will not be scored. Enter fractions as decimals.
4. See below for examples on how to correctly complete an answer grid.

To answer −3 in a question, fill in the answer grid as follows:



To answer .75 in a question, fill in the answer grid as follows:



GO ON TO NEXT PAGE

Unit 1 - Section 1 (Non-Calculator)

This unit has two sections: a non-calculator and a calculator section.

You will now take the first section of this unit in which you may not use a calculator. You will not be allowed to return to the non-calculator section of the test after you have started the calculator section. You will need to finish both sections within the allotted testing time.

Once you finish the non-calculator section, read the directions in your test booklet on how to continue.

1. Joanne buys a rectangular rug with an area of $\frac{35}{4}$ square meters. The length of the rug is $\frac{7}{2}$ meters.

What is the width, in meters, of the rug?

Ⓐ $\frac{5}{8}$

Ⓑ $\frac{7}{8}$

Ⓒ $\frac{5}{2}$

Ⓓ $\frac{7}{2}$

2. The median number of points scored by 9 players in a basketball game is 12. The range of the numbers of points scored by the same basketball players in the same game is 7.

Which statement is true based on the given information?

Ⓐ At least one player scored 12 points.

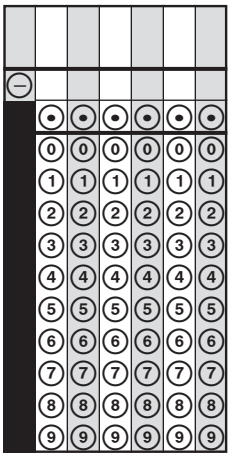
Ⓑ The greatest number of points scored is less than 19 points.

Ⓒ The mean number of points scored is greater than 12 points.

Ⓓ If the greatest number of points scored is 16, then the least number of points scored is 4.

3. Enter your answer in the box.

$33.8 \div 32.5 =$



4. Select each expression that is equivalent to $3(n + 6)$.

Select **all** that apply.

Ⓐ $3n + 6$

Ⓑ $3n + 18$

Ⓒ $2n + 2 + n + 4$

Ⓓ $2(n + 6) + (n + 6)$

Ⓔ $2(n + 6) + n$

5. These five rational numbers are plotted on a horizontal number line.

$$-\frac{2}{3},\ \frac{7}{8},\ -\frac{4}{5},\ \frac{7}{10},\ -\frac{4}{3}$$

Which statement about the locations on the number line of the rational numbers is true?

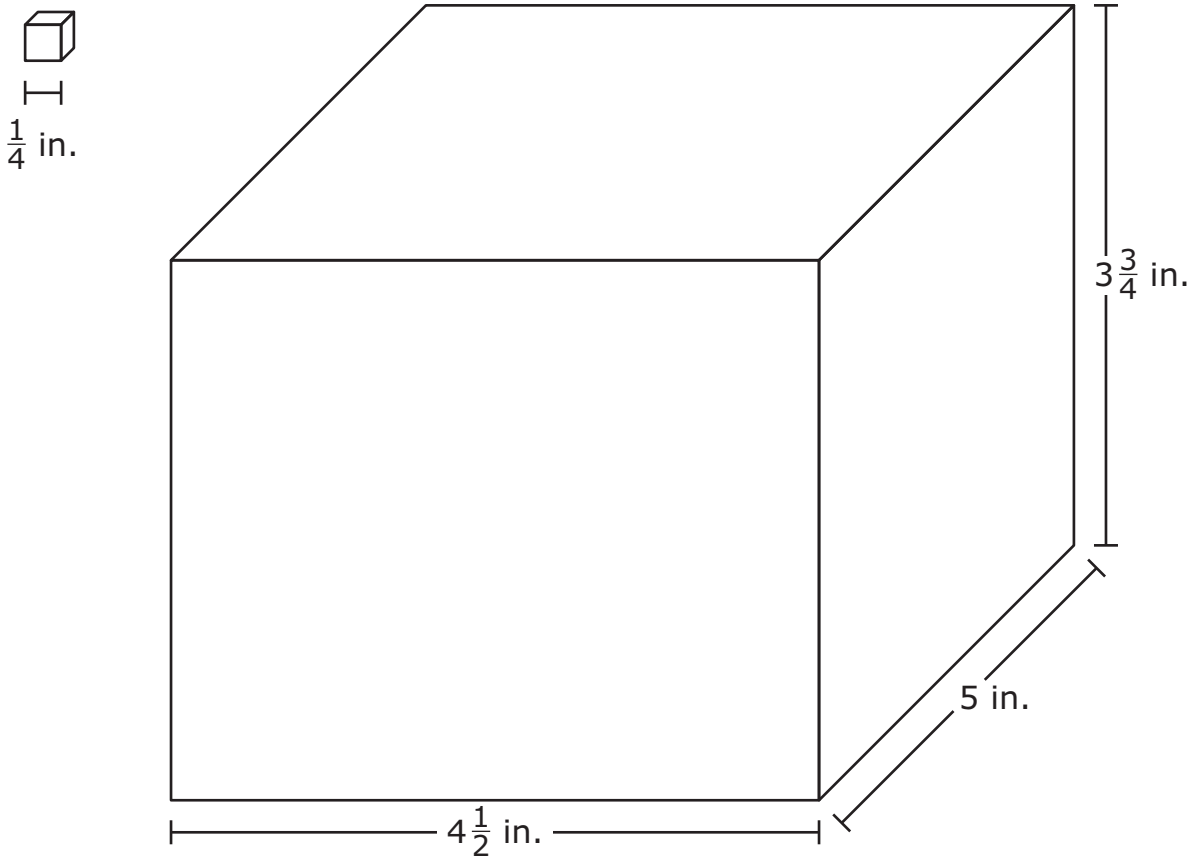
Ⓐ $-\frac{2}{3}$ is farthest to the left, and $\frac{7}{8}$ is farthest to the right.

Ⓑ $-\frac{4}{3}$ is farthest to the left, and $\frac{7}{8}$ is farthest to the right.

Ⓒ $-\frac{2}{3}$ is farthest to the left, and $\frac{7}{10}$ is farthest to the right.

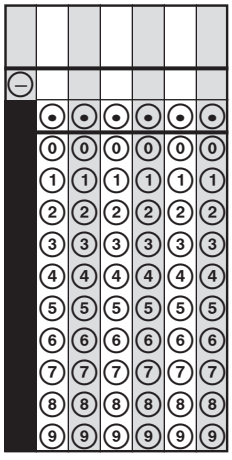
Ⓓ $-\frac{4}{3}$ is farthest to the left, and $\frac{7}{10}$ is farthest to the right.

6. Small cubes with edge lengths of $\frac{1}{4}$ inch will be packed into the right rectangular prism shown.



How many small cubes are needed to completely fill the right rectangular prism?

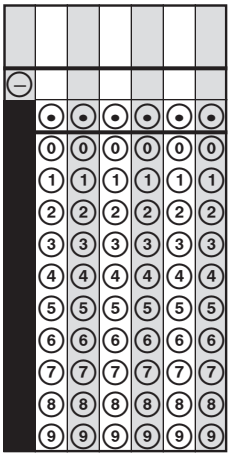
Enter your answer in the box.



7. Solve.

$18.3 \times 4.39 = ?$

Enter your answer in the box.



8. During a sale, all pillows are $\frac{1}{4}$ off the regular price.

Which expression shows the amount of money saved on a pillow that had a regular price of d dollars?

Ⓐ $d \div 4$

Ⓑ $d \times 4$

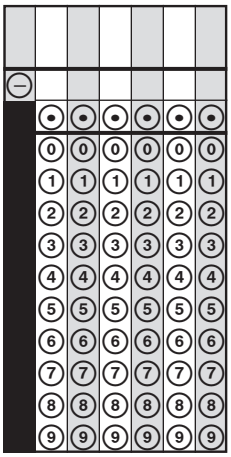
Ⓒ $d + 4$

Ⓓ $d - 4$

9. Carol makes $9\frac{1}{3}$ cups of snack mix. She puts all the snack mix into plastic bags. She puts $\frac{2}{3}$ cup of the snack mix in each bag.

How many plastic bags does Carol need?

Enter your answer in the box.



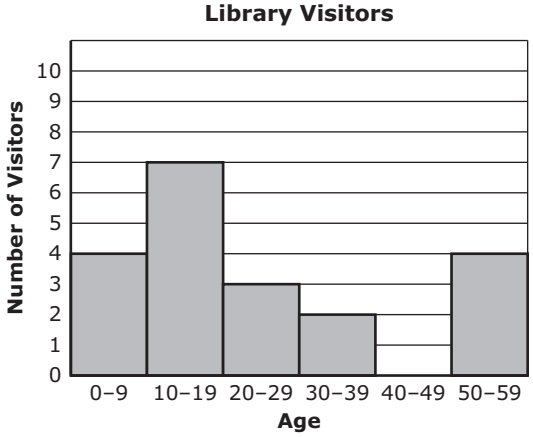
GO ON ▶

10. This table shows the ages of 20 visitors at a library.

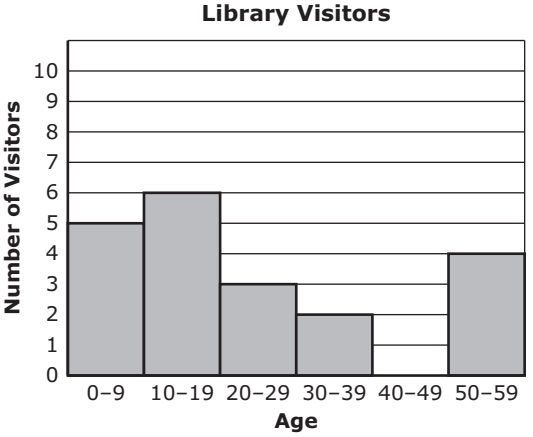
15	27	53	9	8
3	56	12	10	15
18	15	2	31	20
21	33	6	52	56

Which histogram shows the data?

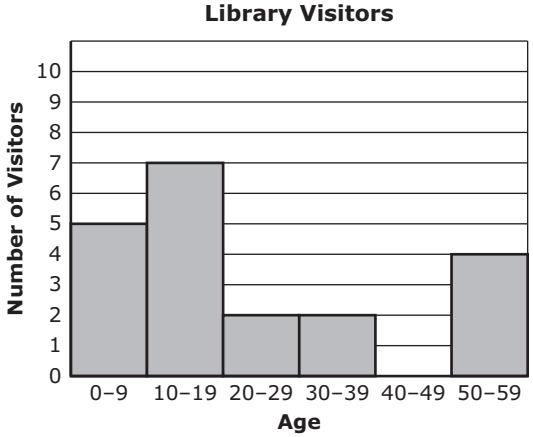
Ⓐ



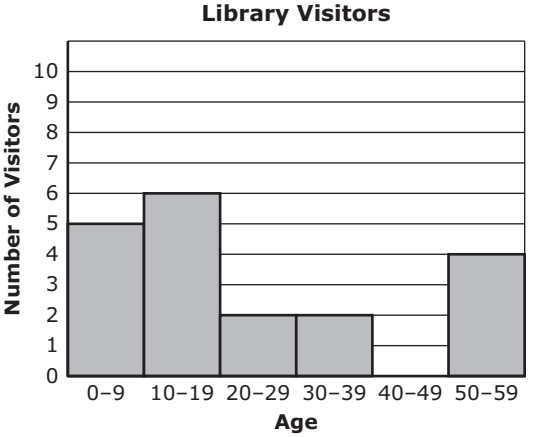
Ⓑ



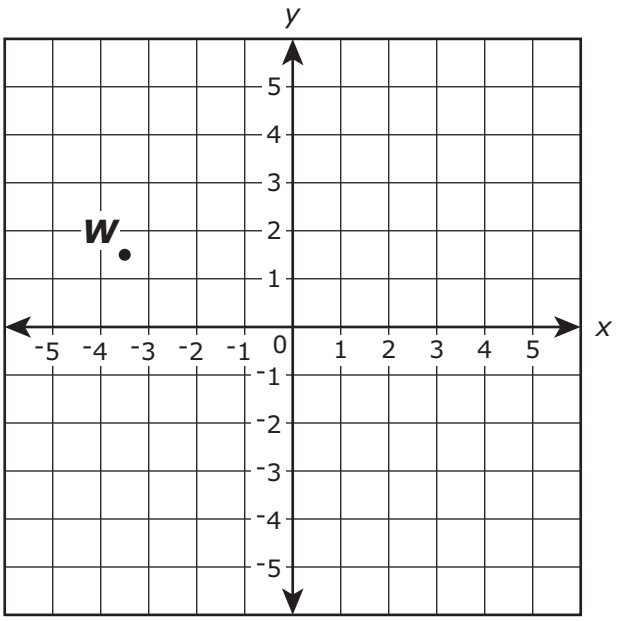
Ⓒ



Ⓓ

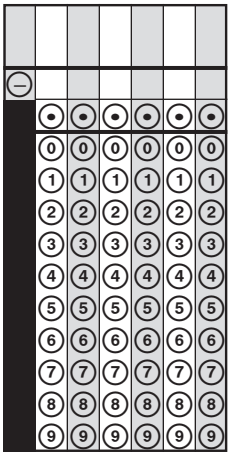


11. This coordinate plane shows the location of point *W*.



What is the value of the *x*-coordinate of point *W*? Enter your answer as a decimal to the nearest 0.5.

Enter your answer in the box.



12. Which question is a statistical question?

Ⓐ How tall is the oak tree?

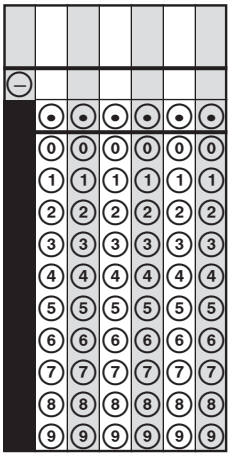
Ⓑ How much did the tree grow in one year?

Ⓒ What are the heights of the oak trees in the schoolyard?

Ⓓ What is the difference in height between the oak tree and the pine tree?

13. What is the greatest common factor of 16 and 48?

Enter your answer in the box.



14. Which equations with exponential expressions are true?

Select **all** that apply.

Ⓐ $3^3 = 3 \cdot 3$

Ⓑ $5^2 = 5 \cdot 5$

Ⓒ $5^4 = 4 \cdot 4 \cdot 4 \cdot 4 \cdot 4$

Ⓓ $7 \cdot 7 \cdot 7 \cdot 7 \cdot 7 \cdot 7 = 6^7$

Ⓔ $7 \cdot 7 \cdot 7 \cdot 7 \cdot 7 \cdot 7 = 7^6$

Ⓕ $7 \cdot 7 \cdot 7 \cdot 7 \cdot 7 \cdot 7 = 7^7$

15. This table shows the numbers of books, by type, checked out from the school library on Monday.

Book Checkout

Book Type	Number of Books
mystery	24
nonfiction	18
adventure	12
humor	16

What is the ratio of mystery books checked out to nonfiction books checked out?

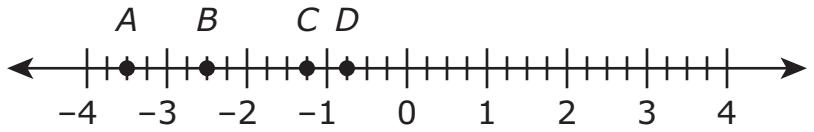
Ⓐ 1 to 2

Ⓑ 2 to 1

Ⓒ 3 to 4

Ⓓ 4 to 3

16. This number line shows four points.



Which point is located at $-\frac{3}{4}$?

Ⓐ point *A*

Ⓑ point *B*

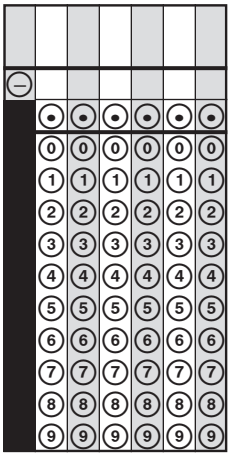
Ⓒ point *C*

Ⓓ point *D*

17. Thomas buys a case of bottled water. A case contains 36 bottles of water and costs $4.69. Thomas will sell each bottle of water for $0.75 at a school event.

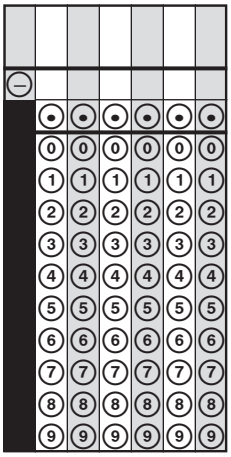
How much profit, in dollars, will Thomas earn if he sells all the bottles of water?

Enter your answer in the box.



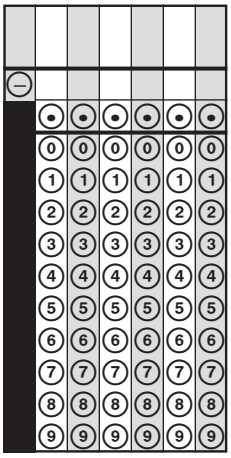
18. Enter your answer in the box.

34,992 ÷ 81 =



19. What is the sum of 74.835 and 2.67?

Enter your answer in the box.



20. Cirrus clouds form at a height of more than 6,000 meters above Earth. Which inequality represents h, the height, in meters, of cirrus clouds?

Ⓐ $6{,}000 > h$

Ⓑ $6{,}000 \geq h$

Ⓒ $6{,}000 < h$

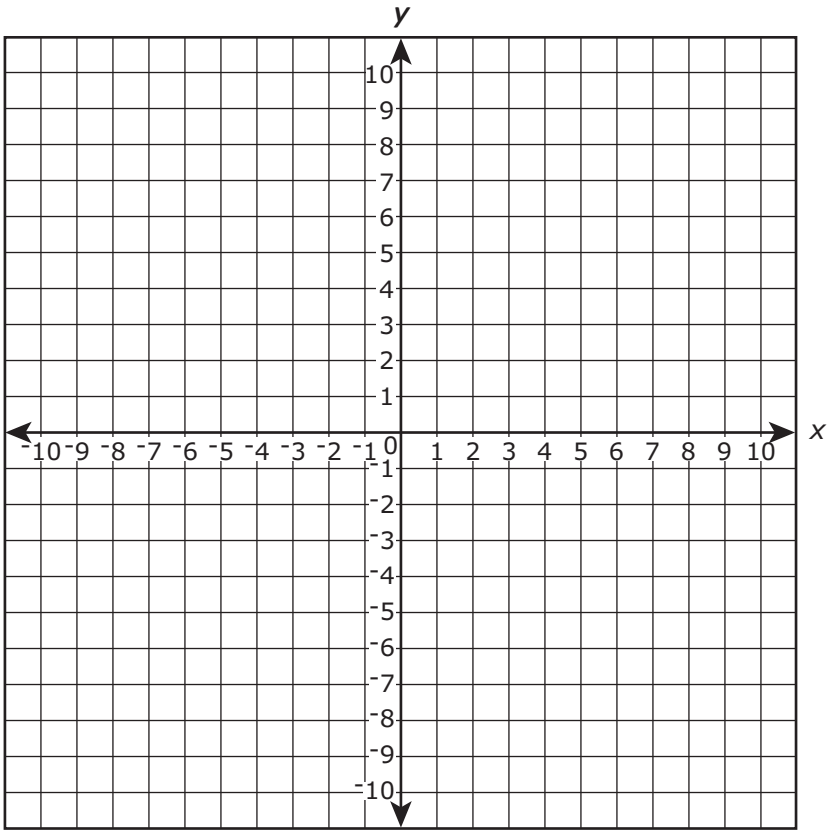
Ⓓ $6{,}000 \leq h$

21. City planners are creating a neighborhood map on a coordinate plane. The table shows the locations of the neighborhood library and school on a coordinate plane.

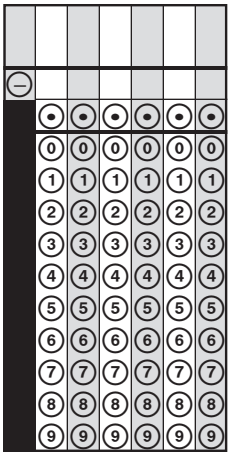
Neighborhood Planning

Building	Location
library	$(-4, -6)$
school	$(5, -6)$

In this coordinate plane, the distance between each gridline represents 1 mile. What is the distance, in miles, between the library and the school? You can use the coordinate plane to help you find the answer by plotting the two points.



Enter your answer in the box.



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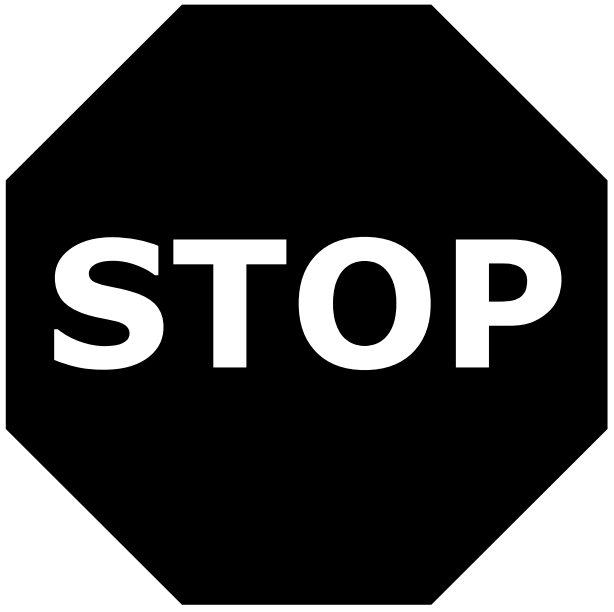


You have come to the end of the non-calculator section in Unit 1 of the test.

- **If you have time, review your answers in the non-calculator section ONLY. You will not be allowed to return to the non-calculator section once you have received your calculator.**
- **Then, raise your hand to receive your calculator before going on to the calculator section.**

Unit 1 - Section 2 (Calculator)

Once you have received your calculator, continue with the calculator section.

Use the information provided to answer Part A and Part B for question 22.

Greg bought 4 notebooks for $6.40.

22. Part A

Which equation can be used to determine the price, p, in dollars, of 1 notebook?

Ⓐ $\frac{p}{4} = 6.40$

Ⓑ $\frac{p}{6.40} = 4$

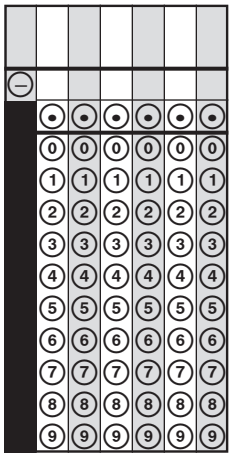
Ⓒ $4p = 6.40$

Ⓓ $6.40p = 4$

Part B

What is the price, in dollars, of 1 notebook?

Enter your answer in the box.



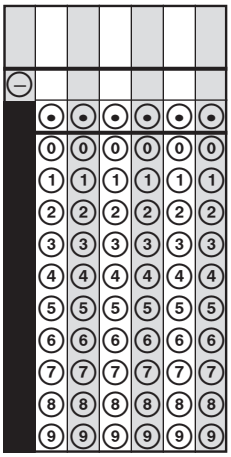
Use the information provided to answer Part A through Part D for question 23.

Chad drove 168 miles in 3 hours.

23. Part A

How many miles per hour did Chad drive?

Enter your answer in the box.

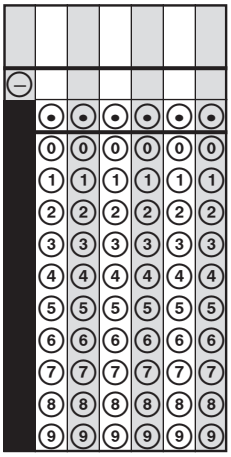


Part B

Chad will drive 672 more miles. He continues to drive at the same rate.

How many hours will it take Chad to drive the 672 miles?

Enter your answer in the box.

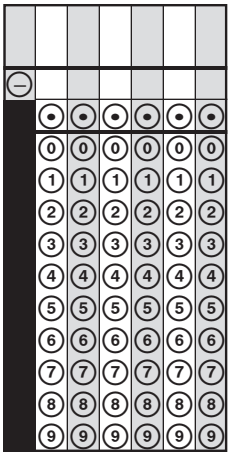


Part C

Chad stopped and filled the car with 11 gallons of gas. He had driven 308 miles using the previous 11 gallons of gas.

How many miles per gallon did Chad's car get?

Enter your answer in the box.

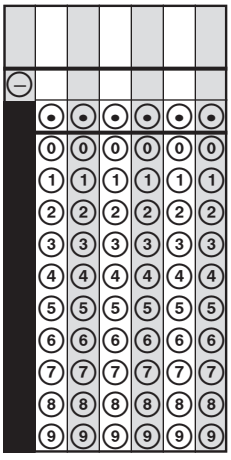


Part D

Chad's car continues to get the same number of miles per gallon.

How many gallons of gas will Chad's car use to travel 672 miles?

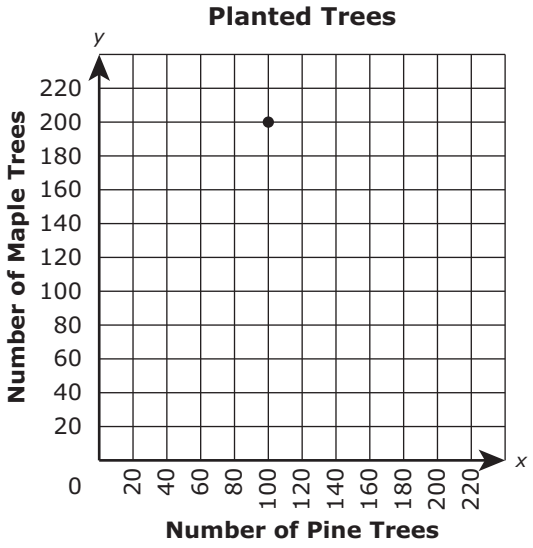
Enter your answer in the box.



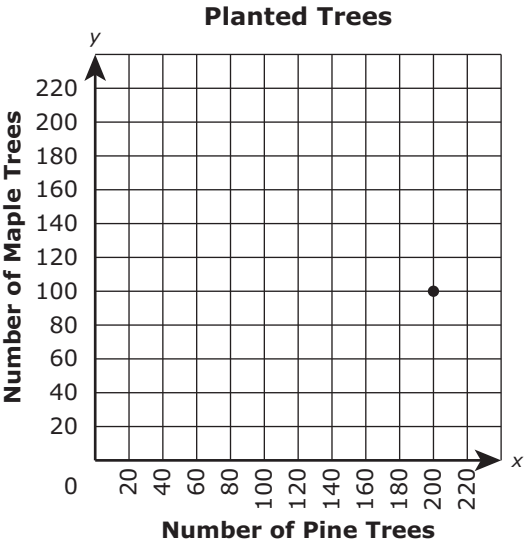
24. A total of 300 pine and maple trees will be planted in a park. There will be 2 pine trees planted for every 3 maple trees planted.

Which coordinate plane shows a point that represents the number of pine trees planted and the number of maple trees planted?

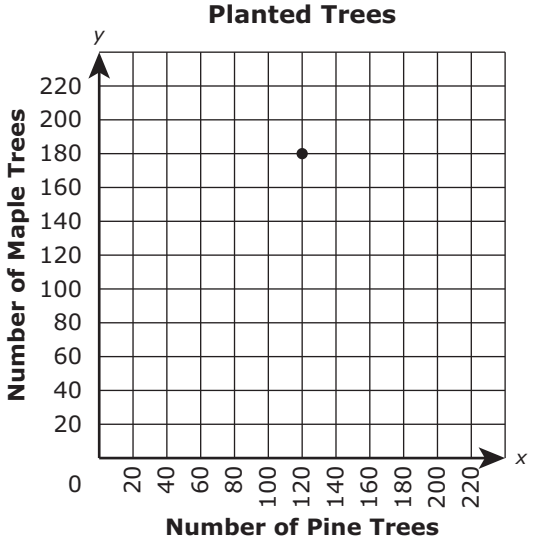
Ⓐ



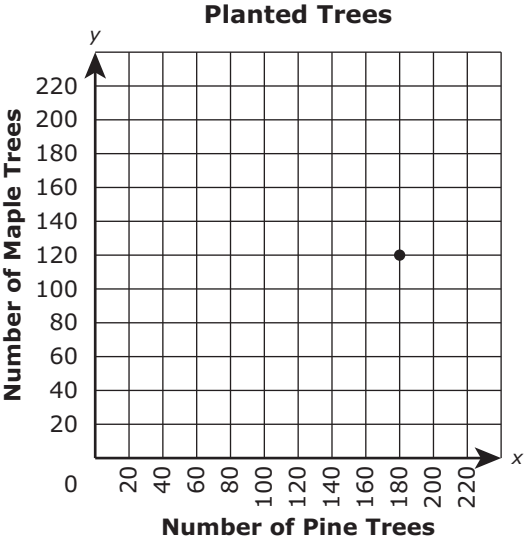
Ⓑ



Ⓒ



Ⓓ



GO ON ▶

Use the information provided to answer Part A and Part B for question 25.

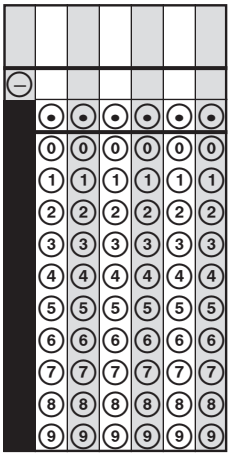
The number of blueberry muffins that a baker makes each day is 40% of the total number of muffins she makes.

25. Part A

On Monday, the baker makes 36 blueberry muffins.

What is the total number of muffins that the baker makes on Monday?

Enter your answer in the box.

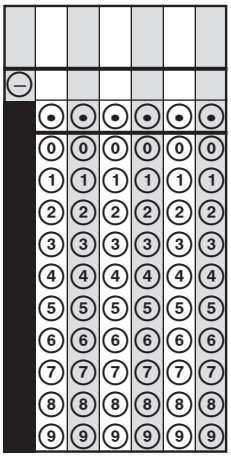


Part B

On Tuesday, the baker makes a total of 60 muffins.

How many blueberry muffins does the baker make on Tuesday?

Enter your answer in the box.



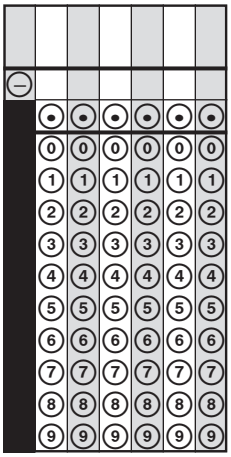
Use the information provided to answer Part A and Part B for question 26.

Shelly biked 21 miles in 4 hours.

26. Part A

What is Shelly's average speed in miles per hour?

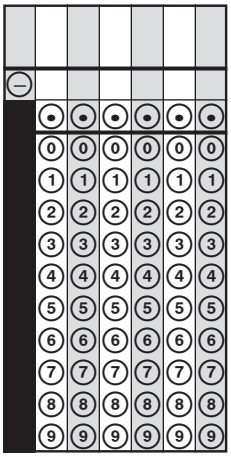
Enter your answer in the box.



Part B

At the same rate, how many hours will it take Shelly to bike 42 miles?

Enter your answer in the box.



27. Which expressions represent "the sum of 3 and n"?

Select **all** that apply.

Ⓐ $3n$

Ⓑ $n + 3$

Ⓒ $3 + n$

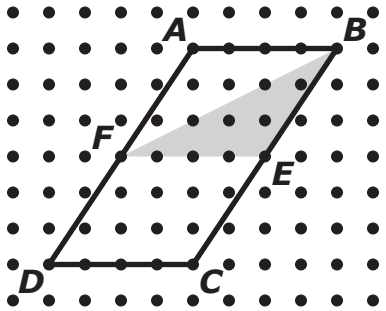
Ⓓ $n + n + n$

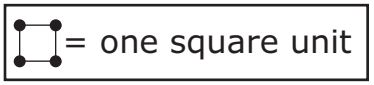
Ⓔ n^3

GO ON ▶

Use the information provided to answer Part A and Part B for question 28.

An advertising company is designing a new logo that consists of a shaded triangle inside a parallelogram.

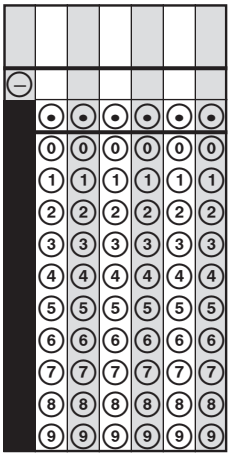




28. Part A

What is the area, in square units, of parallelogram *ABCD*?

Enter your answer in the box.



Part B

In the new logo, what fraction of the parallelogram is shaded?

Ⓐ $\frac{1}{12}$

Ⓑ $\frac{1}{6}$

Ⓒ $\frac{1}{4}$

Ⓓ $\frac{1}{3}$

29. There are 5,280 feet in 1 mile. How many inches are in 2 miles?

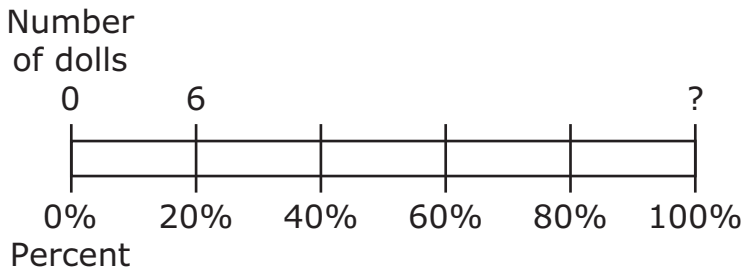
Ⓐ 10,560

Ⓑ 63,360

Ⓒ 126,720

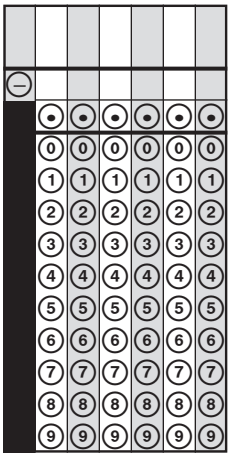
Ⓓ 253,440

30. Anita brings 6 dolls to her grandma's house. These dolls represent 20% of Anita's doll collection, as shown in the diagram.



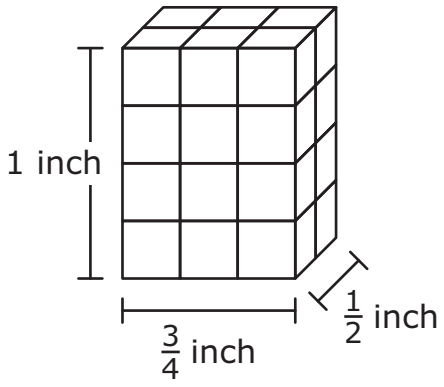
What is the total number of dolls in Anita's doll collection?

Enter your answer in the box.



Use the information provided to answer Part A and Part B for question 31.

This right rectangular prism is built with small cubes.



31. Part A

What is the volume, in cubic inch(es), of the right rectangular prism?

Ⓐ $\frac{3}{8}$

Ⓑ $\frac{2}{3}$

Ⓒ $1\frac{2}{3}$

Ⓓ $2\frac{1}{4}$

Part B

What is the volume, in cubic inch(es), of 1 of the small cubes?

Ⓐ $\frac{1}{64}$

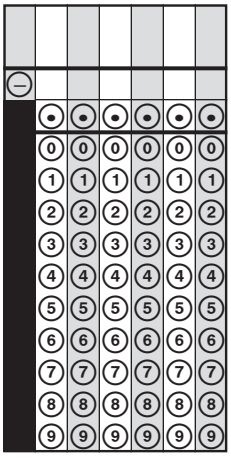
Ⓑ $\frac{1}{16}$

Ⓒ $\frac{9}{16}$

Ⓓ $\frac{3}{8}$

32. What is the value of $a^2 + 3b \div c - 2d$, when $a = 3$, $b = 8$, $c = 2$, and $d = 5$?

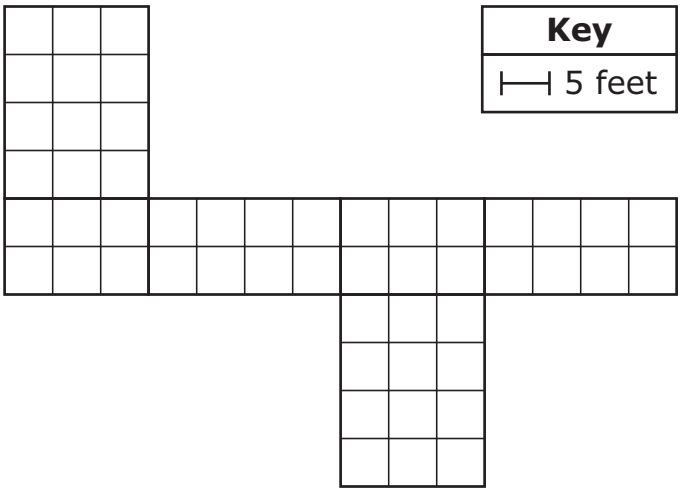
Enter your answer in the box.



GO ON ▶

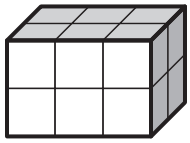
Use the information provided to answer Part A and Part B for question 33.

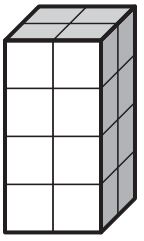
This is a net of a right rectangular prism.

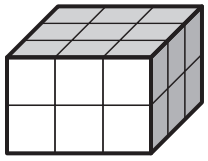


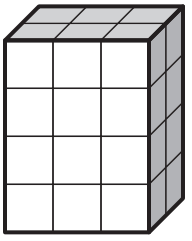
33. Part A

Which prism can be made using the net?

Ⓐ 

Ⓑ 

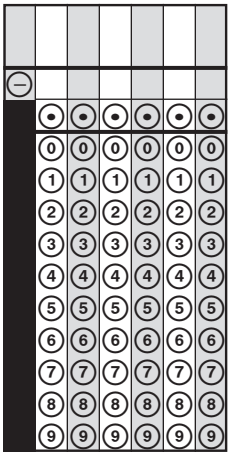
Ⓒ 

Ⓓ 

Part B

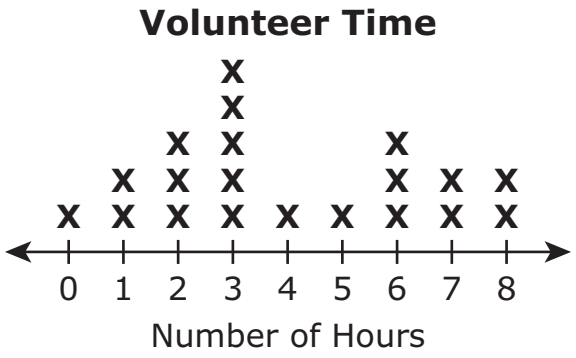
What is the surface area, in square feet, of the prism?

Enter your answer in the box.



Use the information provided to answer Part A and Part B for question 34.

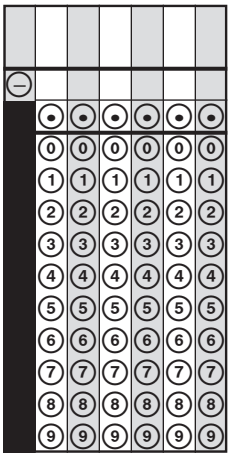
Janet surveyed a class of students. She recorded the number of hours that each student volunteered. This line plot shows the results of the survey.



34. Part A

How many students did Janet survey?

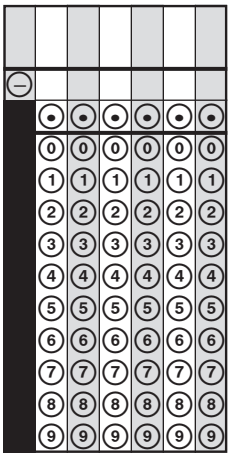
Enter your answer in the box.



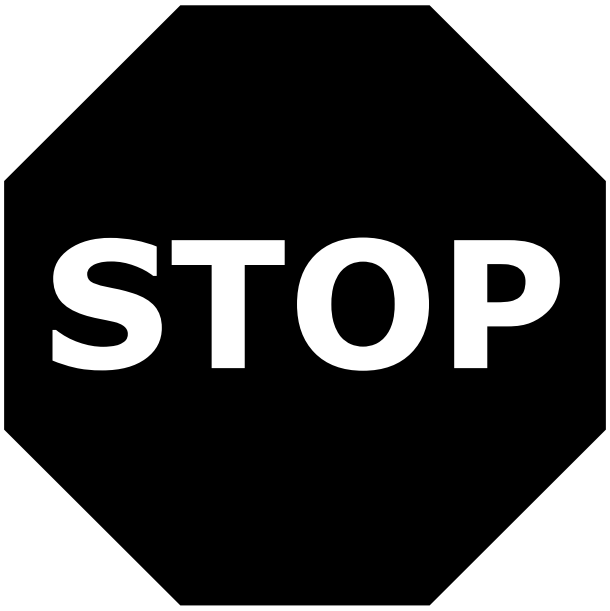
Part B

What is the mean number of hours volunteered by the students in the survey?

Enter your answer in the box.



STOP



You have come to the end of the calculator section in Unit 1 of the test.

- **Review your answers in the calculator section of Unit 1 only.**
- **Then, close your test booklet and raise your hand to turn in your test materials.**

6 - MTH

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