

Name _____



5. 1.143 < 0.485

6. Write $\frac{2}{3}$ and $\frac{3}{4}$ as equivalent fractions using a common denominator. **Possible answers:**

$\frac{8}{12}$	and	$\frac{9}{12}$
----------------	-----	----------------

7. Use the numbers on the tiles to write the value of each expression. You can use a tile more than once or not at all.

$48.6 \div 10^0 =$	<input type="text" value="48.6"/>
$48.6 \div 10 =$	<input type="text" value="4.86"/>
$48.6 \div 10^2 =$	<input type="text" value="0.486"/>

8. Samuel walked in the Labor Day parade. He walked $3\frac{1}{4}$ miles along the parade route and $2\frac{5}{8}$ miles home. For numbers 8a–8c, fill in each blank.

- 8a. Rounded to the closest benchmark, Samuel walked about 3 miles on the parade route.
- 8b. Rounded to the closest benchmark, Samuel walked about 3 miles home.
- 8c. Samuel walked about 6 miles in all.

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End-of-Year Test

SB94

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1. Fahed buys 12 stickers for \$2 each. He also buys 4 sticker albums. Each album costs twice as much as each sticker. Fahed has a coupon that gives him \$2 off the sticker albums. Which numerical expression shows how much he spent?

- (A) $(12 \times 2) + [(4 \times 2) - 2]$ (C) $(12 \times 4) + [(4 \times 4) - 2]$
 (B) $(12 \times 2) + [(4 \times 4) - 2]$ (D) $(12 \times 4) + [(4 \times 2) + 2]$

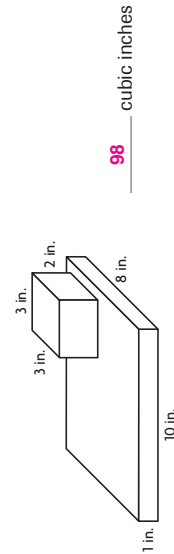
2. Select the number in which the digit 8 is ten times the value of the digit 8 in 4.381. Mark all that apply.

- (A) 183.9 (D) 9.548
 (B) 3.458 (E) 0.184
 (C) 56.82 (F) 1.83

3. Rasheed needs to save \$231. To earn money, he plans to wash cars and charge \$12 per car. Write two estimates Rasheed could use to determine how many cars he needs to wash.

$240 \div 12 = 20$ and $230 \div 10 = 23$

4. What is the volume of the composite figure?



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12. Twelve friends share 4 bread rolls equally. What fraction of a bread roll does each friend get?

Each friend will get $\frac{4}{12}$ or $\frac{1}{3}$ of a bread roll.

13. For numbers 13a–13c, write the name of one figure from the tiles to complete a true statement. Use each figure only once.

- 13a. A **pentagon** is never a parallelogram. pentagon
- 13b. A **parallelogram** is sometimes a rhombus. parallelogram
- 13c. A **square** is always a rectangle. square

14. Megan wants to find the quotient. Use multiplication and the Distributive Property to help Megan find the quotient.

$72 \div 4 =$ 18

Multiplication 18 × 4 = 72

Distributive Property (4 × 10) + (4 × 8)

15. Describe how to locate the ordered pair (6, 8) on a coordinate plane. Begin your description at the origin.

Possible description: From the origin, move 6 units to the right along the x-axis. Then move 8 units up.



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9. Mr. Enders conducted a survey and found that $\frac{2}{5}$ of his students play a team sport and $\frac{1}{4}$ of those students play basketball. What fraction of his students play basketball? Write a number from the number tiles in each box to complete the calculations shown. You may use numbers more than once or not at all.

$\frac{2}{5} \times \frac{1}{4}$	$=$	$\frac{2}{5} \times \frac{1}{4}$	$=$	$\frac{2}{5} \times \frac{1}{4}$
$\frac{2}{5} \times \frac{1}{4}$	$=$	$\frac{2}{5} \times \frac{1}{4}$	$=$	$\frac{2}{5} \times \frac{1}{4}$
$\frac{2}{5} \times \frac{1}{4}$	$=$	$\frac{2}{5} \times \frac{1}{4}$	$=$	$\frac{2}{5} \times \frac{1}{4}$

$\frac{1}{10}$ of his students

10. Write 6.84 in word form.

six and eighty-four hundredths

11. For numbers 11a–11d, without multiplying, use the symbols from the list on the right to indicate how the product will compare with the factor. Symbols can be used more than once.

- 11a. $\frac{3}{4} \times \frac{15}{7} = x$ > < =
- 11b. $7 \times \frac{6}{5} = x$ > < =
- 11c. $\frac{8}{9} \times \frac{1}{5} = x$ < > =
- 11d. $\frac{8}{8} \times \frac{7}{10} = x$ < > =



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16. Multiply $7,952 \times 8$. Explain how you know your answer is reasonable.

63,616; Possible explanation: 7,952 rounds to 8,000. To estimate the product I found $8,000 \times 8 = 64,000$. This is close to the answer I calculated, so my answer is reasonable.

17. Write the letter for the place value in the box next to the number that shows 143.649 rounded to that place value.

- A tenths E 143.65
B hundreds B 100
C ones C 144
D tens A 143.6
E hundredths D 140

18. Choose the numbers to create a story problem that represents $3 \div \frac{1}{4}$.

Rob bought $\frac{1}{3}$ $\frac{3}{4}$ 3 $\frac{1}{4}$ pound(s) of roast beef.

He made sandwiches for a picnic and used 4 $\frac{1}{4}$ $\frac{1}{3}$ pound(s) of roast beef in each sandwich.

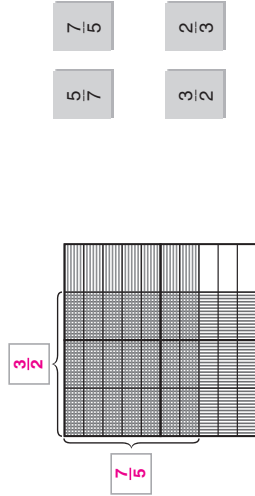
Rob made 12 sandwiches.

Name _____

19. Rahul draws the area model to help him solve a multiplication problem.

Part A

Use the numbers from the list on the right to complete the area model.



Part B

What is the answer to the problem Rahul was working on? Show your work.

$$\frac{7}{5} \times \frac{3}{2} = \frac{21}{10} = 2\frac{1}{10}$$

20. Karl drove 617.3 miles. For each gallon of gas, the car can travel 41 miles. Select a reasonable estimate of the number of gallons of gas Karl used. Mark all that apply.

- A 1.5 gallons C 16 gallons
 B 1.6 gallons D 150 gallons
 E 15 gallons

Name _____

21. Without multiplying, classify each product as being less than $\frac{5}{6}$, equal to $\frac{5}{6}$, or greater than $\frac{5}{6}$. Write the letter of each expression in the correct box.

- A** $\frac{5}{6} \times \frac{4}{1}$ **B** $\frac{5}{6} \times 4$ **C** $\frac{5}{6} \times \frac{1}{4}$ **D** $\frac{5}{6} \times 3$ **E** $\frac{5}{6} \times \frac{3}{5}$ **F** $\frac{5}{6} \times \frac{5}{1}$

Less Than $\frac{5}{6}$
B, C, E

Equal to $\frac{5}{6}$
D

Greater Than $\frac{5}{6}$
A, F

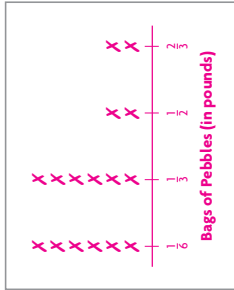
22. Shane filled bags with pebbles.

- The weights of the bags are $\frac{1}{6}$ lb, $\frac{1}{3}$ lb, $\frac{2}{6}$ lb, $\frac{1}{2}$ lb, $\frac{1}{6}$ lb, $\frac{1}{6}$ lb, $\frac{1}{3}$ lb, $\frac{2}{6}$ lb, $\frac{1}{3}$ lb, $\frac{1}{6}$ lb, $\frac{1}{6}$ lb, $\frac{1}{3}$ lb, $\frac{1}{6}$ lb.

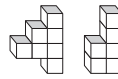
Organize the information in a line plot.

What is the average weight of the bags?

$\frac{1}{3}$ pound(s)



23. Match the figure with the number of unit cubes that would be needed to build each figure. Not every number of unit cubes will be used.



- 6 unit cubes
- 7 unit cubes
- 8 unit cubes
- 9 unit cubes

24. Ava has two frogs. This is $\frac{1}{3}$ the number of frogs that Heather has. How many frogs does Heather have? Draw a diagram to represent the division. Then write and solve an equation.

6 frogs; Equations may vary. Possible equation: $x = 2 \div \frac{1}{3}$; Check students' drawings.

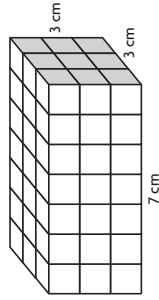
GO ON

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25. Jake has cubes that measure 5 inches on each side. Which of statements are true? Mark all that apply.

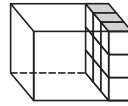
- (A) The volume of one cube is 25 cubic inches.
- (B) If Jake fills a box with 12 cubes, the volume of the box is about 1,500 cubic inches.
- (C) If the volume of the box is 800 cubic inches, Jake can fit 6 cubes in the box.
- (D) If the volume of the box is 1,000 cubes, Jake can fit 10 cubes in the box.

26. Raul used 1-centimeter cubes to build the rectangular prism shown. Find the volume of the rectangular prism Raul built.



63 cubic centimeters

27. Clarice packed 1-inch cubes into a box with a volume of 36 cubic inches. How many layers of 1-inch cubes did Clarice pack?



4 layers

28. Kristin drew a triangle with 2 congruent sides and 1 right angle. Which term accurately describes the triangle? Mark all that apply.

- (A) isosceles
- (B) scalene
- (C) right
- (D) obtuse

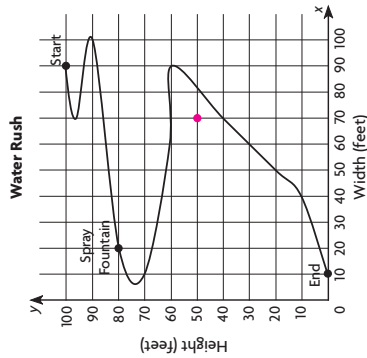
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End-of-Year
Performance Task

Water Rush

1. Ms. Luca designs a new water ride for a theme park. The coordinate grid shows her plan for the path of the boats through the ride.



- a. What are the coordinates of the Start and End of the ride?
Start: (90, 100); End: (10, 0)

- b. Ms. Luca decides to place a waterfall 50 feet to the right and 30 feet below the Spray Fountain. What ordered pair describes the location of the waterfall?
(70, 50)

- c. Plot and label the location of the waterfall on the coordinate grid above.

GO ON

Name _____

End-of-Year
Performance Task

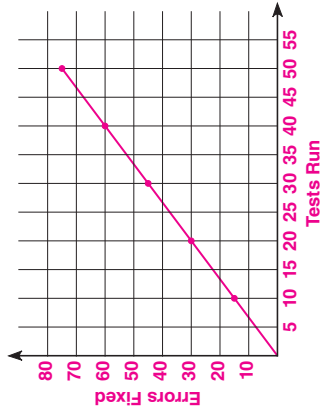
2. Once the Water Rush ride is built, Ms. Luca begins safety tests. For every 10 tests she runs, Ms. Luca finds and fixes 15 safety errors. Fill in the missing numbers in the table.

Tests Run	10	20	30	40	50
Errors Fixed	15	30	45	60	75

- a. What rule could you write that relates Tests Run to Errors Fixed?

Possible rule: Divide the number of Tests Run by 10, then multiply by 15

- b. Graph Ms. Luca's data.



- c. Estimate the number of errors Ms. Luca could expect to find and fix if she runs 33 tests. Explain how you found your answer.

Possible estimate: 50 errors; I know my answer will be between 45 errors for 30 tests run and 60 errors for 40 tests run. I found 33 tests run on the x-axis and drew a line to where 33 tests would hit the line on the graph. It's about where the line crosses 50 on the y-axis.

GO ON

Name _____

End-of-Year Performance Task

3. Boats going through the Water Rush ride travel 0.06 miles. The most popular ride in the theme park is 174 yards long. What is the difference between the length of this ride and the length of Water Rush in feet? Show your work.

205.2 feet

$0.06 \text{ miles} \times 5,280 \text{ feet} = 316.8 \text{ feet}$

$174 \text{ yards} \times 3 \text{ feet} = 522 \text{ feet}$

$522 - 316.8 = 205.2 \text{ feet}$

4. Plans say that 1,800 gallons of water are recycled through the Water Rush ride each minute. Ms. Luca wants to make a statement about the number of quarts of water that are recycled each second. What should her statement be? Show your work.

Possible statement: 120 quarts are recycled through the

Water Rush ride each second.

1 minute = 60 seconds; 1,800 gallons \div 60 = 30 gallons

each second; 1 gallon = 4 quarts; 30 gallons \times 4 = 120

quarts each second.

5. Ms. Luca starts a test run for the Water Rush ride at 3:58 P.M. The test lasts for 1 hour and 24 minutes. At what time does the test end? Describe how you found your answer.

5:22 P.M.; Possible explanation: I added 1 hour to 3:58 to

get 4:58. Then I added 24 minutes to get to 5:22 P.M.



SB103

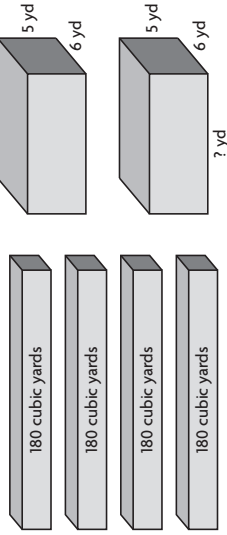
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End-of-Year Performance Task

6. In her first design for Water Rush, Ms. Luca used 4 same-size rectangular bins to hold sand. Each bin had a volume of 180 cubic yards. Then Ms. Luca changed her design to use 2 new same-size rectangular bins. The total volume of the 2 new bins is equivalent to the total volume of the 4 original bins.



What is the length of each of the new bins? Show your work.

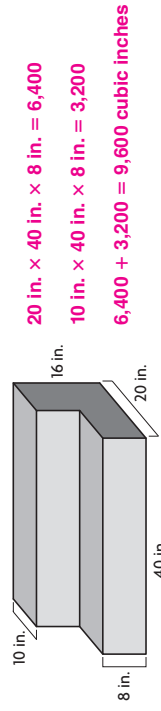
12 yards

$6 \times 5 \times l = 180 \times 2$

$30 \times l = 360; 360 \div 30 = 12$

$l = 12$

7. Riders go up 2 steps to get on the Water Rush boats. The drawing shows the measurements of the steps.



What is the total volume of the steps? Show your work.

9,600 cubic inches



SB104

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