



Get Ready for 6th Grade Math- Summer Work Instructions

It is important to keep your skills sharp to be ready for math this fall. This summer work is a review of the most important concepts you have learned this past year.

1. Complete these work pages. You must show all of your work! Bring them to your math teacher on or before September 19th. This work will be part of your first marking period grade.
2. Study all multiplication facts. You can use flashcards or online games and apps to practice. You should know all facts 1-12 quickly and automatically.

X	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	3	4	5	6	7	8	9	10	11	12
2	2	4	6	8	10	12	14	16	18	20	22	24
3	3	6	9	12	15	18	21	24	27	30	33	36
4	4	8	12	16	20	24	28	32	36	40	44	48
5	5	10	15	20	25	30	35	40	45	50	55	60
6	6	12	18	24	30	36	42	48	54	60	66	72
7	7	14	21	28	35	42	49	56	63	70	77	84
8	8	16	24	32	40	48	56	64	72	80	88	96
9	9	18	27	36	45	54	63	72	81	90	99	108
10	10	20	30	40	50	60	70	80	90	100	110	120
11	11	22	33	44	55	66	77	88	99	110	121	132
12	12	24	36	48	60	72	84	96	108	120	132	144

Unit 1 Practice

Name: _____

Number and Operations in Base Ten

In this unit you learned to:	Lesson
read and write decimals, for example: $80.63 = 8 \times 10 + 6 \times \frac{1}{10} + 3 \times \frac{1}{100}$.	1, 3
compare decimals, for example: $3.47 > 3.096$.	1, 4
round decimals, for example: 6.274 rounded to the nearest tenth is 6.3.	4
multiply whole numbers, for example: $410 \times 16 = 6,560$.	2, 5
divide whole numbers, for example: $2,812 \div 38 = 74$.	6
add and subtract decimals, for example: $20.08 + 5.15 = 25.23$.	7
multiply decimals, for example: $7.25 \times 9.4 = 68.15$.	8
divide decimals, for example: $18.72 \div 3.6 = 5.2$.	9

Use these skills to solve problems 1–5.

1 Answer the following questions about the decimals 2.65 and 0.609.

a. Write the word form of each decimal.

2.65

0.609

b. Write each decimal to complete the inequality statement.

_____ > _____

2 Over one weekend The Fast Florist makes 368 deliveries of one dozen roses. Did The Fast Florist deliver more than or less than 4,000 roses? Explain.



Solve.

3 An above-ground pool holds 5,310 gallons of water. How many times could the water in the pool fill a bathtub that holds 45 gallons of water?

- A** 85 times
- B** 118 times
- C** 122 times
- D** 1,018 times

4 What is $2.4 - 2.24$?

- A** 0.16
- B** 0.26
- C** 2.24
- D** 24

5 Katrin is making a poster for school elections. She draws a line 20.4 centimeters long across the poster board. She starts at one end of the line and makes a mark every 3.4 centimeters along it. She plans to write the letters of her name in the spaces between the marks.

Part A

Will Katrin make enough spaces for each letter of her name to go in one space? Explain.

Show your work.

Solution: _____

Part B

Katrin has 5 letters in her last name. Fill in the blanks to complete the equation to show how long the line has to be for her to have enough spaces to write both her first and last name and leave a space in between.

Equation: _____ \times 3.4 = _____ centimeters

Number and Operations—Fractions

In this unit you learned to:	Lesson
add and subtract fractions with unlike denominators, for example: $\frac{3}{5} + \frac{1}{4} = \frac{17}{20}$.	10, 11
estimate sums or differences of fractions, for example: $2\frac{3}{8} + 5\frac{1}{2}$ is a little less than 8.	11
multiply fractions, for example: $\frac{2}{3} \times \frac{5}{6} = \frac{10}{18}$ or $\frac{5}{9}$.	12, 13, 14, 15, 16
divide unit fractions, for example: $4 \div \frac{1}{7} = 28$.	17, 18

Use these skills to solve problems 1–7.

- 1** Roma makes 44 ounces of salsa. She pours an equal amount into 5 containers. How much salsa does she pour in each container? Write a division expression to represent the problem and solve.

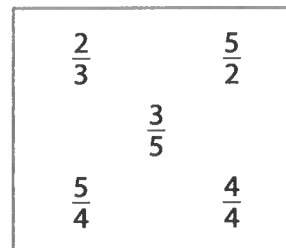
- 2** Which of the following does the dark gray area of the area model represent? Circle the letter of all that apply.

- A** $\frac{1}{2} \times \frac{1}{4}$
- B** $\frac{1}{8} \times \frac{1}{2}$
- C** $\frac{1}{4} \div 2$
- D** $\frac{1}{8} \div \frac{1}{2}$



- 3** Write one fraction from the box to make each sentence true.

- a. The product _____ $\times \frac{3}{8}$ is greater than $\frac{3}{8}$.
- b. The product _____ $\times \frac{3}{8}$ is less than $\frac{3}{8}$.
- c. The product _____ $\times \frac{3}{8}$ is equal to $\frac{3}{8}$.



Solve.

- 4 Nance is riding her bike to a friend's house $4\frac{1}{2}$ miles away. She's ridden $2\frac{3}{5}$ miles. How much farther does she need to ride? Estimate, and then compute.

Explain how you know your answer is reasonable.

Show your work.

Solutions: _____

- 5 Nick's grandfather grows tomatoes in a section of his yard that is $\frac{4}{5}$ -meter long and $\frac{2}{3}$ -meter wide. What is the area of the tomato section?
- _____

- 6 Ron is slicing 5 pizzas. Each slice is $\frac{1}{8}$ of the pizza. How many pizza slices will there be in all?

- A 5 slices
- B 8 slices
- C 13 slices
- D 40 slices

- 7 Natan's family spent $2\frac{1}{4}$ hours visiting a national monument near their home. They watched a video in the visitor's center for $\frac{1}{3}$ of that time. How much time did they spend watching the video?

Show your work.

Solutions: _____

Unit 3 Practice

Name: _____

Operations and Algebraic Thinking

In this unit you learned to:	Lesson
evaluate expressions, for example: $48 \div (6 + 10) = 3$.	19
write expressions, for example: "subtract 5 from 12, then multiply by 4" can be written as $(12 - 5) \times 4$.	19
find the relationship between two sequences, for example: sequence 1: 0, 2, 4, 6, 8, ... sequence 2: 0, 8, 16, 24, 32, ... Each term in sequence 2 is 4 times the corresponding term in sequence 1.	20
create ordered pairs for two sequences and graph the relationship on the coordinate plane, for example: ordered pairs for sequence 1 and 2 above are (0, 0), (2, 8), (4, 16), (6, 24), (8, 32).	20

Use these skills to solve problems 1–5.

- 1 Replace with a number from the box to write the expression described.

6	10	8
14	9	7

$$12 \times (\text{ } - 5)$$

- a. The expression with the greatest value.

$$12 \times (\text{ } - 5)$$

- b. The expression with the least value.

$$12 \times (\text{ } - 5)$$

- 2 Write numerical expressions for "the quotient of 18 and 6, plus 3" and "18 divided by the sum of 6 and 3." Compare the expressions using $<$, $>$, or $=$.

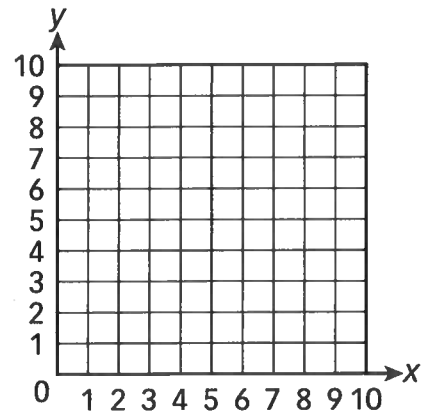
_____ ○ _____



Solve.

3 Begin at 0 and use the rules “add 3” and “add 1” to complete the table. Then plot the ordered pairs on the graph.

Add 3 (x)	Add 1 (y)	Ordered Pairs (x, y)
<input type="checkbox"/>	<input type="checkbox"/>	(0, 0)
<input type="checkbox"/>	<input type="checkbox"/>	(<input type="checkbox"/> , <input type="checkbox"/>)
<input type="checkbox"/>	<input type="checkbox"/>	(<input type="checkbox"/> , <input type="checkbox"/>)
<input type="checkbox"/>	<input type="checkbox"/>	(<input type="checkbox"/> , <input type="checkbox"/>)



4 Look at the ordered pairs in problem 3. How do the values of the x-coordinates compare to the values of the y-coordinates?

- A** They are 3 times as great.
- B** They are $\frac{1}{3}$ as great.
- C** They are 4 times as great.
- D** They are $\frac{1}{4}$ as great.

5 If you were to connect the points on the graph in problem 3, what would the graph look like?

Unit 4 Practice

Name: _____

Measurement and Data

In this unit you learned to:	Lesson
convert from one measurement to another, for example: $4 \text{ ft} = 48 \text{ in.}$	21, 22
make a line plot of data represented as fractions of measurements.	23
find volume by counting unit cubes.	24, 25
find volume by using a formula.	26
find volumes of composite figures.	27

Use these skills to solve problems 1–5.

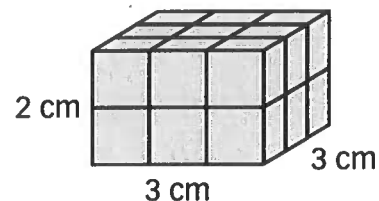
- 1** A standard fire hose is 50 feet long. What is the length of the hose in yards and feet?

(1 yard = 3 feet)

Show your work.

Solution: _____

- 2** Which expression can be used to find the volume of the rectangular prism below? Circle the letter for all that apply.



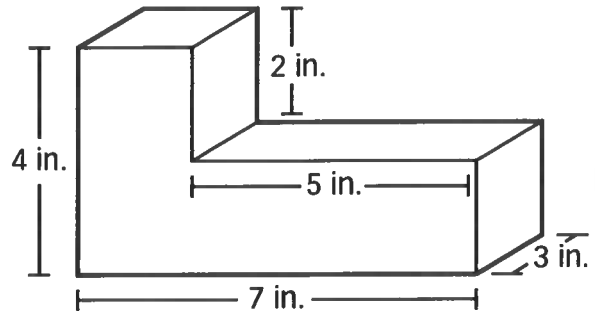
- A** $2 \times 3 \times 3$
- B** 9×2
- C** $2 + 3 + 3$
- D** $9 + 2$
- E** $9 + 9$

Solve.

3 Jacinda and Priya are on the school swim team. Jacinda swims 0.956 kilometer during practice. Priya swims 987 meters. Circle the letter that shows which girl swam farther and correctly compares the distances in the same unit of measurement.

- A** Jacinda
9,560 meters $>$ 987 meters
- B** Jacinda
0.956 kilometer $>$ 0.0987 kilometer
- C** Priya
0.956 kilometer $<$ 0.987 kilometer
- D** Priya
95.6 meters $<$ 987 meters

4 The diagram shows two rectangular prisms joined together. What is the combined volume of these prisms?



Show your work.

Solution: _____

5 Jorge wants to find out how many cubes will fill the box. He stacks some cubes in the box as shown.

Part A

How many more cubes does Jorge need to fill the box?

Solution: _____

Part B

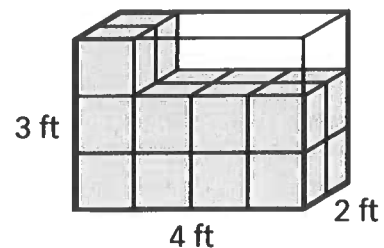
What is the total volume of the box?

Solution: _____

Part C

How could Jorge have found the volume of the box without filling the box with cubes? Explain.

Solution: _____



Unit 5 Practice

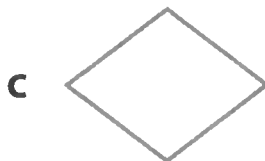
Name: _____

Geometry

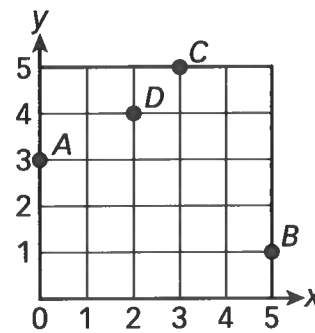
In this unit you learned to:	Lesson
graph points in the first quadrant of the coordinate plane.	28
find the distance between two points on the coordinate plane.	29
graph real-world situations on the coordinate plane and interpret the meaning of the graph.	29
classify two-dimensional figures based on their properties, for example: a square is also a rhombus or rectangle, but not all rhombuses and rectangles are squares.	30, 31

Use these skills to solve problems 1–5.

1 Which figure has all the properties of a parallelogram? Circle the letter for all that apply.



2 Write the letter of each point in the box next to the matching ordered pair.



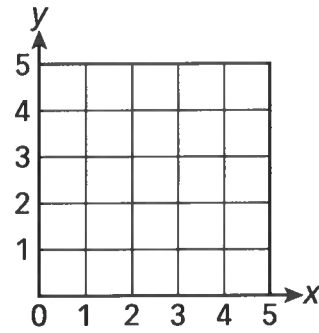
- (5, 1)
- (3, 5)
- (2, 4)
- (0, 3)



Solve.

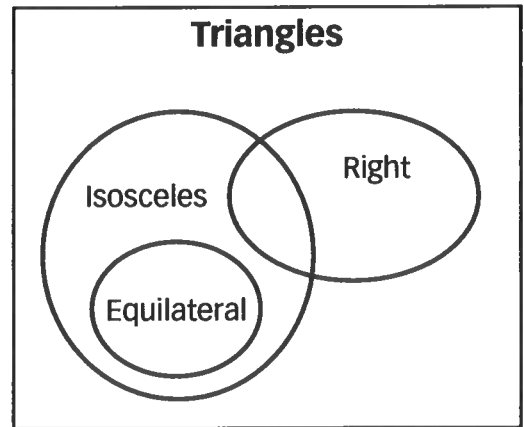
- 3** Plot the points $(1, 1)$, $(1, 4)$, $(3, 1)$, and $(3, 4)$ on the coordinate plane to the right. Connect the points to form a quadrilateral.

Write all the names that can be used to classify the shape. List them in order from general to specific, starting with "quadrilateral." Justify how you came up with the specific shape name.



- 4** Look at the Venn diagram. Choose *True* or *False* for each statement.

- a. An equilateral triangle is never a right triangle. True False
- b. An isosceles triangle is always a right triangle. True False
- c. An equilateral triangle is always an isosceles triangle. True False



- 5** Draw a rectangle on the coordinate plane with a perimeter of 16 units. Write the coordinates of the corners. Tell how you know the perimeter is 16 units.

