

Vacation Math Practice
April 2019

Dear Families:

This is the vacation math packet which you requested. Please note the answers to the questions are located at the back of this packet. It is suggested that you take these pages off and allow your child to work through a page, then share the answers. In the event an answer is incorrect, find out why that is so, and make the corrections. As your child's teachers, we are always interested in the steps they took to arrive at each answer. **Please make sure they are showing their work on the page or on the back of each practice section.**

When working through these problems, we noted a conversion chart would be helpful. Below you will find some conversions and formulas your child should use to assist in arriving at the correct answer.

Just a reminder that these practice pages are due on Monday, April 29th, 2019. Many thanks for providing your child with the time and guidance to complete these valuable practice sessions.

Sincerely,
The 5th Grade Math Teachers:
Ms. Gates, Mrs. Kamats, Mrs. Kline & Mr. Rehrauer

There are 180° in triangles
There are 360° in quadrilaterals
Congruent means same size,
same shape

1,000 milliliters = 1 liter
1,000 grams = 1 kilogram
10 millimeters = 1 centimeter

Perimeter = add all sides
Volume = $L \times W \times H$ or lwh or $b \times h$
Area = $L \times W$ or lw

16 ounces = 1 pound

12 inches = 1 foot
3 feet = 1 yard
5,280 feet = 1 mile
1,760 yards in a mile

Practice 1

1. One number in this pattern is wrong.

12, 20, 28, 34, 44, 52

What change should be made to correct this pattern?

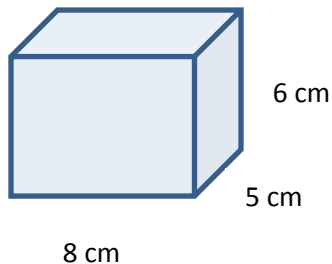
- a. replace 44 with 42
- b. replace 34 with 32
- c. replace 34 with 36
- d. replace 28 with 26

2. What number is needed to name the equivalent fraction?

$$\frac{2}{4} = \frac{\quad}{2}$$

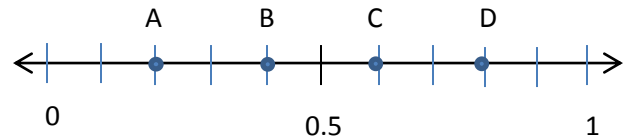
- a. 1
- b. 2
- c. 4
- d. 6

3. What is the volume of this rectangular prism?



- a. 19 cubic cm
- b. 240 cubic cm
- c. 200 cubic cm
- d. 46 cubic cm

4. Which point on the number line shows $\frac{2}{5}$?



- a. Point A
- b. Point B
- c. Point C
- d. Point D

5. A recipe calls for $\frac{3}{4}$ of a pound of sugar.

Which of the following is equivalent to $\frac{3}{4}$ of a pound?

- a. 16 ounce
- b. 8 ounces
- c. 4 ounces
- d. 12 ounces

6. Ben walked $\frac{2}{3}$ of a mile and Cade walked $\frac{1}{4}$ of a mile. How far did they walk in all?

- a. $\frac{11}{12}$
- b. $\frac{1}{7}$
- c. $\frac{3}{7}$
- d. $\frac{3}{12}$

7. Caleb is 140 cm tall. His sister, Catherine is 1,090 mm tall. Who is taller and by how much?

- a. Catherine is 31 cm taller than Caleb
- b. Catherine is 210 cm taller than Caleb
- c. Caleb is 31 cm taller than Catherine
- d. Caleb is 210 cm taller than Catherine

8. What is the value of the expression below if y is equal to 81?

$$100 - (4 + y)$$

- a. 15
- b. 11
- c. 25
- d. 17

Practice 2

1. Davis made 2.5 kilograms of popcorn and ate 750 grams of it while watching a movie. How much popcorn was left?

- a. 125 grams
- b. 175 grams
- c. 1,250 grams
- d. 1,750 grams

2. Solve:

$$6.45 \times 8.9 =$$

- a. 57.405
- b. 574.05
- c. 5,740.5
- d. 5.7405

3. Which of the following is equal to 40 tens?

- a. 410
- b. 4,000
- c. 400
- d. 4,100

4. What is the area of the square?



$4 \frac{1}{2}$ ft

- a. 9 sq.ft²
- b. $20 \frac{1}{4}$ ft²
- c. 18 ft²

5. 18 hundredths = _____ hundredths + 8 hundredths

- a. 8
- b. 10
- c. 9
- d. 100

6. A rhombus is a special type of _____ because it has two pairs of parallel sides.

- a. Parallelogram
- b. Trapezoid
- c. Square
- d. Rectangle

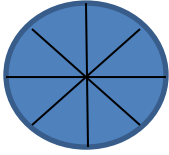
7. What number is two-tenths greater than 2.54?

- a. 2.34
- b. 4.54
- c. 2.74
- d. 2.57

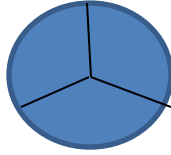
Explain how you found your answer.

Practice 3

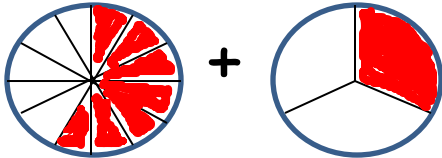
1. This is 1.



This is also 1.



What is



a. $\frac{11}{12}$

c. $\frac{9}{12}$

b. $\frac{11}{15}$

d. $\frac{8}{15}$

2. How many angles are congruent in an equilateral triangle?

- a. 2
- b. 1
- c. 3
- d. 0

3. Which of the following is ordered from least to greatest?

a. $.40, \frac{1}{5}, .8, \frac{1}{10}$

b. $\frac{1}{10}, \frac{1}{5}, .40, .8$

c. $.8, .40, \frac{1}{5}, \frac{1}{10}$

4. A tent has space for 8 campers. How many tents are needed for 153 campers?

- a. 20
- b. 17
- c. 21
- d. 18

5. Solve:

$$7.895 + 2.5$$

- a. 10.395
- b. 9.395
- c. 6.920
- d. 8.395

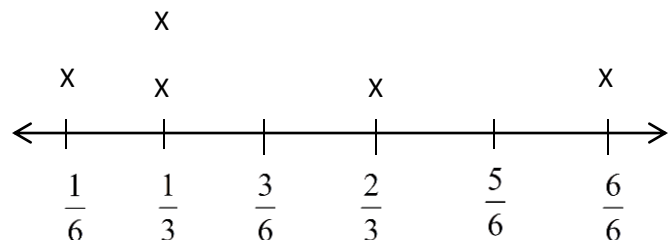
6. The line plot shows the distance 5 students live from school. Billy lives the farthest from school. Kate lives closest to school. How much further does Billy live from school than Kate?

a. $\frac{1}{6}$ mile

c. $\frac{6}{6}$ mile

b. $\frac{1}{3}$ mile

d. $\frac{5}{6}$ mile



Practice 4

1. What is the correct way to write this fraction as an expression?

$$\frac{7}{8}$$

- a. 7×8
- b. 8×7
- c. $8 \div 7$
- d. $7 \div 8$

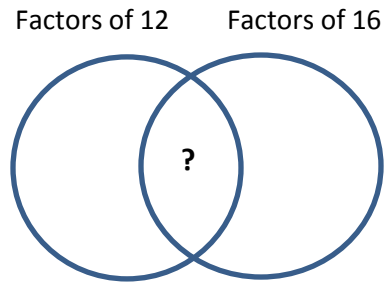
2. McKenzie has $\frac{9}{10}$ pounds of candy. She eats $\frac{1}{3}$ of it after lunch. How much candy does McKenzie eat?

- a. $\frac{10}{13}$
- b. $\frac{9}{30}$
- c. $\frac{8}{7}$
- d. $\frac{4}{5}$

3. What is the smallest number that is a multiple of both 2 and 5?

- a. 10
- b. 5
- c. 20
- d. 25

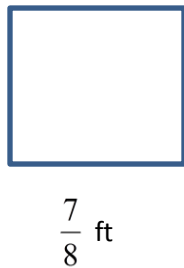
4. Which number could be written in the center of the venn diagram?



- a. 5
- b. 4
- c. 20
- d. 32

5. What is the perimeter of this square?

- a. $3\frac{1}{4}$ ft
- b. $3\frac{1}{2}$ ft
- c. $3\frac{3}{4}$ ft
- d. $4\frac{1}{4}$ ft



6. How many 200 milliliter cups can be filled from a 2 liter jug of lemonade?

- a. 10
- b. 8
- c. 15
- d. 12

7. Which of the following is closest to $\frac{3}{4}$ of a dollar?

- a. \$0.25
- b. \$0.70
- c. \$0.20
- d. \$0.75

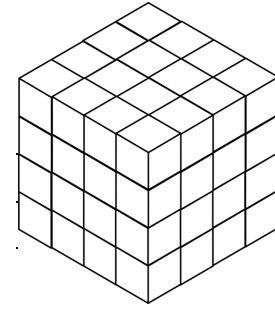
Explain how you found your answer

Practice 5

1. If three packages of pencils cost \$1.89, how much does one package cost?

- a. \$0.53
- b. \$0.55
- c. \$0.65
- d. \$0.63

2. What is the volume of this cube?



1 cm cubes

- a. 64 cm^2
- b. 32 cm^2
- c. 16 cm^2
- d. 256 cm^2

3. Which best describes the solution to this expression?

$$10\frac{1}{5} \div 5$$

- a. A little more than 2
- b. A little less than 3
- c. A little more than $2\frac{1}{2}$
- d. A little less than $2\frac{1}{2}$

4. Samantha ran $3\frac{1}{8}$ miles and then walked $2\frac{1}{2}$ miles. How much farther did she run than walk?

- | | |
|-------------------------|------------------|
| a. $1\frac{5}{8}$ miles | c. $\frac{3}{8}$ |
| b. $1\frac{3}{8}$ miles | d. $\frac{5}{8}$ |

5. What number would be 4 hundredths more than 494.932?

- a. 894.932
- b. 498.932
- c. 494.972
- d. 494.936

6. 500 thousandths = _____ hundredths

- a. 5
- b. 50
- c. 5000
- d. 5,000

7. The volume of a container is 24 cubic inches. Which of the following could not be the dimensions of the container?

- a. 6 inches x 4 inches x 1 inch
- b. 5 inches x 4 inches x 4 inches
- c. 8 inches x 6 inches x $\frac{1}{2}$ inch
- d. 2 inches x 6 inches x 2 inches

Explain how you know this

Practice 6

1. The lengths of the sides of a triangle are 8 inches, 9 inches, and 10 inches. What type of triangle is it?

- a. Scalene
- b. Isosceles
- c. Equilateral
- d. Straight

2. Colton bought 5 oranges of equal weight. If the total weight of the oranges was 1.52 pounds, how much did each orange weigh?

- a. 3.40 pound
- b. 3.04 pound
- c. 0.304 pound
- d. 0.34 pound

3. What is one-tenth less than 4.781?

- a. 4.681
- b. 4.691
- c. 4.780
- d. 4.782

4. What number is needed to name the equivalent fraction?

$$\frac{5}{8} = \frac{\quad}{24}$$

- a. 10
- b. 20
- c. 5
- d. 15

5. A school bus is about 40 feet long. About how many yards is this?

- a. Between 10 and 15
- b. Less than 10 yards
- c. More than 20 yards
- d. Between 15 and 20 yards

6. Which of the following is equivalent to 0.400?

- a. 0.004
- b. 0.04
- c. 0.040
- d. 0.4

7. Ledger ran around the track at the middle school 8 times. He ran the first lap in lane 1, the second lap in lane 2, the third lap in lane 3, and so on. The total distance he ran was 4.275 miles

What is this distance rounded to the nearest hundredth? _____

Did Ledger run more or less than $4\frac{1}{4}$ miles? Explain how you know. _____

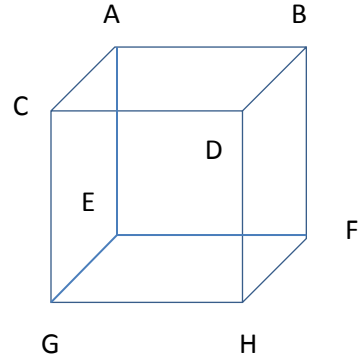
Practice 7

1. Megan received an itunes gift card for \$20 for her ipad. If she buys 6 different apps at \$1.99 each, how much money will she have left on her gift card?

- a. \$8.06
- b. \$8.94
- c. \$9.06
- d. \$11.94

2. Which edge is parallel to edge DB?

- a. EF
- b. CD
- c. AB
- d. HF



3. Kara had 12 barbie dolls. She got 4 new ones for her birthday. Then she gave half of her barbies to her little sister. Which expression shows how many barbies Kara has now?

- a. $(12 \times 4) - 2$
- b. $(12 + 2) \div 4$
- c. $(12 + 4) \div 2$
- d. $(12 + 2) - 4$

4. Two types of quadrilaterals with right-angled vertices are _____.

- a. Trapezoids and squares
- b. Squares and rhombi
- c. Trapezoids and rhombi
- d. Squares and rectangles

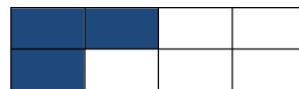
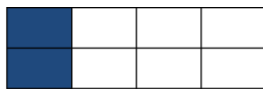
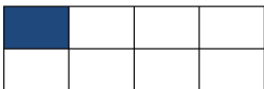
5. On Monday Larissa walked 3.25 miles, and on Friday she walked 3.15 miles. In which place do these numbers differ?

- a. Ones
- b. Tenths
- c. Tens
- d. Oneths

6. Georgia drank 500 ML of chocolate milk every day for 1 week. How much chocolate milk did she drink in all?

- a. 3 liters
- b. $3\frac{1}{2}$ liters
- c. 6 liters
- d. $6\frac{1}{2}$ liters

6. The shaded part of each rectangle represents a fraction. As you go from left to right, how much does each fraction increase? How do you know?



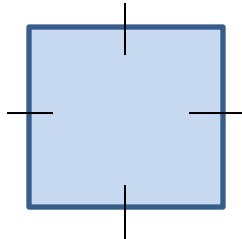
Practice 8

1. Cason poured $1\frac{1}{2}$ cups of water into a teapot and then added another $1\frac{9}{10}$ cups of water. How much water was in the teapot in all?

- | | |
|-------------------|-------------------|
| a. $3\frac{2}{5}$ | c. $2\frac{5}{6}$ |
| b. $2\frac{2}{5}$ | d. $3\frac{5}{6}$ |

3. Classify the quadrilateral.

- a. Parallelogram
- b. Rectangle
- c. Rhombus
- d. All of the above



2. The numbers below are ordered from least to greatest.

$$\frac{1}{3}, \frac{1}{2}, 0.6, \underline{\hspace{2cm}}, 0.7, \frac{9}{10}$$

Which of the following fractions could be used to fill in the space?

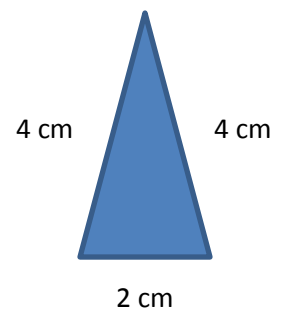
- | | |
|-------------------|----------------------------|
| a. $\frac{2}{3}$ | How did you know?
_____ |
| b. $\frac{3}{4}$ | _____ |
| c. $\frac{4}{5}$ | _____ |
| d. $\frac{8}{10}$ | _____ |

4. Bella ran 10.4 miles on Monday and 4.6 miles on Tuesday. How much farther did Bella run on Monday than on Tuesday?

- a. 6.8 miles
- b. 6.2 miles
- c. 5.8 miles
- d. 15 miles

5. Which of the following best describes the triangle?

- a. Right isosceles
- b. Acute equilateral
- c. Acute isosceles
- d. Obtuse scalene



6. Two students were having an argument. Haley said, "All polygons are quadrilaterals." Tiffany said, "All quadrilaterals are polygons." Who is right? Explain why you agree or disagree with each statement.

Practice 9

1. The numbers below form a pattern.

32, 39, 46, 53, x

Which expression shows how to find x?

- a. $32 + 7$
- b. $53 - 7$
- c. $53 + 7$
- d. 32×7

2. Which fraction is equivalent to $1\frac{5}{8}$?

- a. $\frac{5}{16}$
- b. $\frac{40}{8}$
- c. $\frac{13}{3}$
- d. $\frac{13}{8}$

3. Mrs. Ferguson's baby weighed 8 pounds at birth. Which of the following is equivalent to 8 pounds?

- a. 128 ounces
- b. 118 ounces
- c. 88 ounces
- d. 188 ounces

4. Which of the following is equal to 100,000?

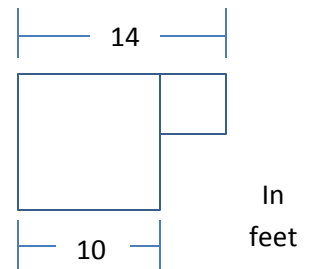
- a. 10^4
- b. 10^3
- c. 10^5
- d. 10^6

5. Caroline uses 3 staples in every 8 inches of the banner. How many staples will Caroline use in 4 feet of banner?

- a. 12
- b. 18
- c. 24
- d. 32

6. Emma drew an outline of her classroom and the adjoining bathroom. Both rooms are shaped like squares. What is the total area of both rooms?

- a. 116 ft^2
- b. 100 ft^2
- c. 16 ft^2
- d. 48 ft^2



7. List all of the factors for the number 60:

Practice 10

1. Justin bought 8 apples. Three-fourths of the apples were red. How many red apples did Erin buy?

- a. 6
- b. 2
- c. 4
- d. 8

2. Barbara spent \$8.53 for lunch. Which of the following shows \$8.53 rounded to the nearest dollar?

- a. \$9.00
- b. \$9.50
- c. \$8.50
- d. \$8.00

3. If the perimeter of an equilateral triangle 12 ft. What is the length of each side?

- a. 3 ft
- b. 4 ft
- c. 5 ft
- d. 12 ft

4. Which of the following is the best estimate of the solution for 314×83 ?

- a. 240
- b. 2,400
- c. 24,000
- d. 240,000

5. Solve:

$$3\frac{1}{3} + 1\frac{1}{4}$$

- a. $4\frac{1}{12}$
- b. $4\frac{2}{7}$
- c. $4\frac{7}{12}$
- d. $4\frac{11}{12}$

6. Which of the following means the same as

$$(3 \times 1,000) + (5 \times 100) + (1 \times 10) + (6 \times 1) + (2 \times \frac{1}{10})$$

- a. 300,516.2
- b. 30,0516.02
- c. 3,501.62
- d. 3,516.2

7. Sally drew 8 stars. Shade the number of stars needed to show 0.75.



What fraction of the stars did you shade? _____

Practice 11

1. This chart shows information for a rectangular prism.

length	width	height	volume
4 cm	?	7 cm	168 cm^3

What is the width of the rectangular prism?

- a. 6 cm
- b. 2 cm
- c. 4 cm
- d. 8 cm

2. Which expression represents the product of b and 8?

- a. $8 \div b$
- b. $8 - b$
- c. $8b$
- d. $B + 9$

3. Subtract:

$$5\text{L } 100 \text{ mL} - 4 \text{ L} = \underline{\hspace{2cm}} \text{ mL}$$

- a. 100
- b. 900
- c. 1,000
- d. 1,100

4. Greg's garden is 78 ft^2 . Lance's garden is twice the size of Greg's garden. Which of the following could be the dimensions of Lance's garden?

- a. $9\frac{3}{4} \text{ ft} \times 4 \text{ ft}$
- c. $9\frac{1}{4} \text{ ft} \times 4 \text{ ft}$
- b. $9\frac{3}{4} \text{ ft} \times 16 \text{ ft}$
- d. $9\frac{1}{4} \text{ ft} \times 16 \text{ ft}$

5. Which of the following is equal to 60 thousands?

- a. 600 hundreds
- b. 600 ones
- c. 6,000 ones
- d. 6,000 hundreds

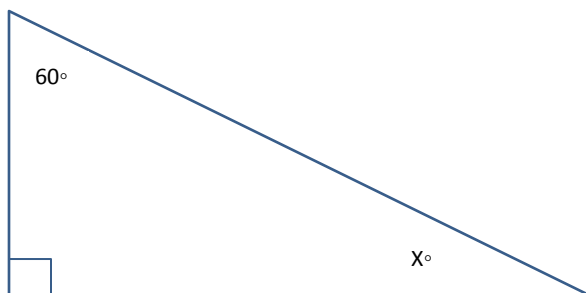
6. What is the solution to $\frac{1}{2} + \frac{2}{8}$ in simplest form?

- a. $\frac{1}{4}$
- c. $\frac{3}{4}$
- b. $\frac{1}{3}$
- d. $\frac{6}{8}$

7. What is the measure of the unknown angle? Name this triangle by its **angles** and **sides**.

The measure of the unknown angle is _____.

This is a _____ triangle.



Practice 12

1. A row of seats at a theater is 5.64 meters long. If there are 12 seats in the row, how wide is each seat?

- a. 0.47 meter
- b. 4.07 meters
- c. 4.7 meters
- d. 47 meters

2. 3 tenths + 5 hundredths = _____ hundredths

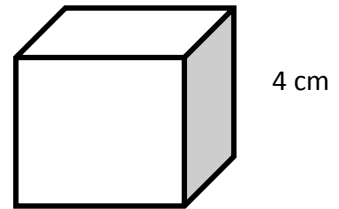
- a. 35
- b. 350
- c. 335
- d. 53

3. Stephanie has 4,090 pennies in a jar. How much money does she have in dollars and cents?

- a. \$4.09
- b. \$40.09
- c. \$40.90
- d. \$409.00

4. The cube shown has a volume of 64cm^3 . What is the area of one of the faces?

- a. 8 cm^2
- b. 12 cm^2
- c. 16 cm^2
- d. 32 cm^2



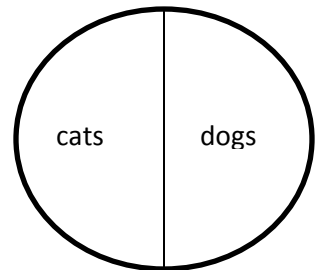
5. Solve:

$$2.43 + 0.3 + 9 =$$

- a. 3.55
- b. 3.63
- c. 11.55
- d. 11.73

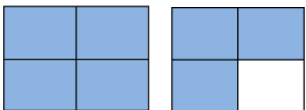
6. If 13, 254 people were surveyed, how many people voted for cats?

Favorite animals



- a. 6, 127
- b. 6, 162
- c. 6, 622
- d. 6,627

7. Kerry said that the shaded amount of the squares is between 1 and 1.5. Is she correct? Explain why or why not.



Answers

Practice 1

1. C
2. A
3. B
4. B
5. D
6. A
7. C
8. A

Practice 2

1. D
2. A
3. C
4. B
5. B
6. A
7. C

Practice 3

1. A
2. C
3. B
4. A
5. A
6. D

Practice 4

1. D
2. B
3. A
4. B
5. B
6. A
7. D

Practice 5

1. D
2. A
3. A
4. D
5. C
6. B
7. B

Practice 6

1. A
2. C
3. A
4. D
5. A
6. D
7. 4.28 miles, Ledger ran more than $4\frac{1}{4}$ miles ($4\frac{1}{4} = 4.25$)

Practice 7

1. A
2. D
3. C
4. D
5. B
6. B
7. The shaded part of the rectangles increase by $\frac{1}{8}$ each time because the whole is $\frac{8}{8}$

Practice 8

1. A
2. A
3. D
4. C
5. C
6. Tiffany is correct; all quadrilaterals are polygons. (Explanations will vary)

Practice 9

1. C
2. D
3. A
4. C
5. B
6. A
7. 1, 2, 3, 4, 5, 6, 10, 12, 15, 20, 30, 60

Practice 10

1. A
2. A
3. B
4. C
5. C
6. D
7. Shade 6 stars, $\frac{3}{4}$

Practice 11

1. A
2. C
3. D
4. B
5. A
6. C
7. 30 degrees, right and scalene

Practice 12

1. A
2. A
3. C
4. C
5. D
6. D
7. No, 1.75 or $1\frac{3}{4}$ of the squares are shaded and 1.75 or $1\frac{3}{4}$ is greater than 1.5 or $1\frac{1}{2}$