Students Entering

Fifth Grade

Summer Math Packet

Name_____

Dear Parents,

The attached packet provides a range of activities that review and expand on the math concepts your child has learned in school this past year. It is designed to be worked on for 15 to 30 minutes a day throughout the summer, rather than completed in just a few days at the beginning or end of summer. The goal is to keep skills sharp to be ready to move forward into the next school year.

We've used IXL to reinforce our curriculum this year. IXL is an online program that allows students to practice math skills aligned with the CT Common Core State Standards. Some of the summer math work will be completed on IXL. All students can access IXL anywhere where they can access the internet (phones, iPads, computers, public library, etc.) Directions for logging on are included.

Students **will** be asked to hand in their completed work the first week of school.

Have a great summer!

Students Entering Grade 5

1. Use the following URL: www.ixl.com/signin/staonline
2. Log-in using the username and password. **Your child MUST log-in otherwise we will not receive their completed work.**
3. Sign in to IXL – Fourth Grade Math

Fraction equivalence and ordering

P.5 Find equivalent fractions using area models
P.6 Graph equivalent fractions on number lines
P.7 Equivalent fractions

Units of measurement

N.2 Which customary unit is appropriate?
N.11 Which metric unit is appropriate?

Probability and statistics

V.1 Understanding probability
V.2 Find the probability

Geometric measurement

BB.1 Perimeter
BB.4 Select two figures with the same area

Two-dimensional figures

W.1 Open and closed shapes
W.2 Is it a polygon?

1.) A local car dealer sold 870 cars last month. He sold 100 **MORE** cars this month than last month. How many cars did he sell this month?

    a) 770
    b) 870
    c) 970
    d) 1070

2.) Which means the same as 7,046?

    a) 7000 + 40 + 6
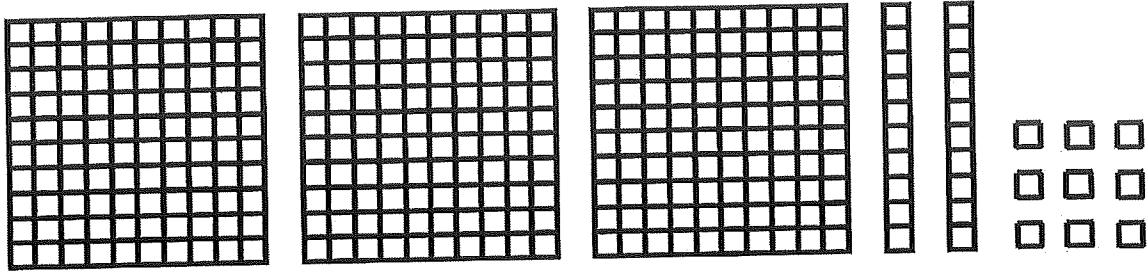   b) 7000 + 406
    c) 700 + 40 + 6
    d) 70 + 46

3.) Which means the same as 95?

    a) 9 tens and 15 ones
    b) 90 tens and 5 ones
    c) 8 tens and 15 ones
    d) 7 tens and 15 ones

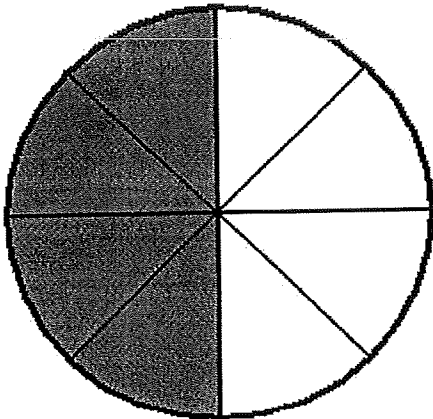4.) In which number does 4 have the **GREATEST** value?
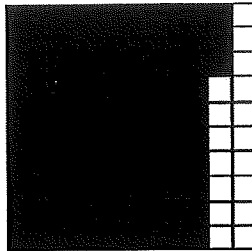
    a) 34
    b) 43
    c) 435
    d) 534

5.) What number is shown by the blocks pictured above? _____

6.) What fractional part of this figure is shaded?
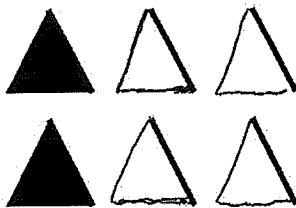

a) $\dfrac{1}{8}$

b) $\dfrac{1}{4}$

c) $\dfrac{1}{2}$

d) $\dfrac{3}{4}$

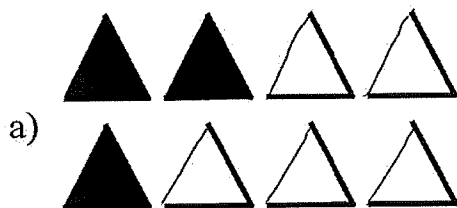7.) The shaded part of this picture shows what decimal number?
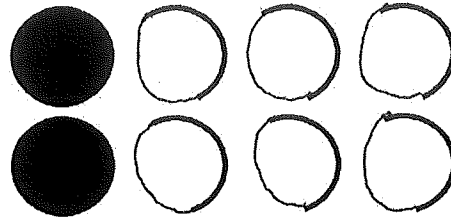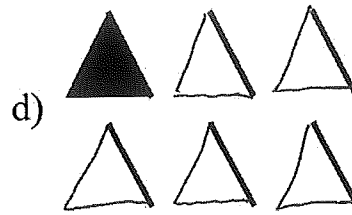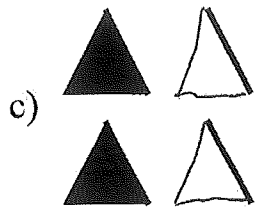

a) 0.17
b) 0.38
c) 0.83
d) 1.3

Equivalent Fractions, Decimals, and Percents

8.) Which picture below has the same fractional part shaded as the picture above?

a)

b)

c)

d)

9.) Which picture below has the same fractional part shaded as the picture above?

a)

b)

c)

d)
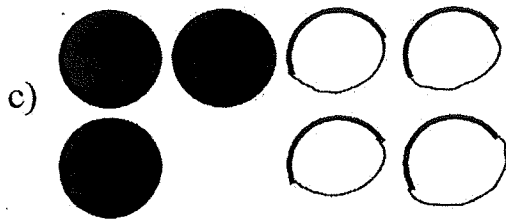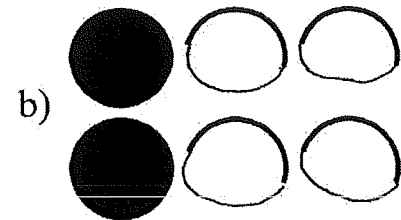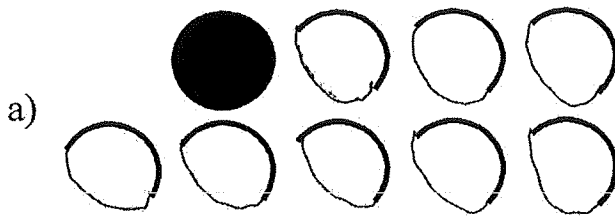
Order, Magnitude, and Rounding of Numbers

10.) The table below shows games won by the players in a tournament.

CHECKERS TOURNAMENT

Players	Games Won
Eric	162
Mark	97
Jeff	184
Zach	76

What is the correct order of games won by the players from **LEAST** to **GREATEST**?

a) Zach, Mark, Eric, Jeff
b) Eric, Zach, Jeff, Mark
c) Jeff, Eric, Mark, Zach
d) Mark, Jeff, Eric, Zach

11.) The table below shows the speeds of four animals.

SPEEDS OF ANIMALS

Animal	Speed (mph)
Cheetah	70
Elk	45
Pronghorn	60
Lion	50

What is the correct order of speed of the animals from **GREATEST** to **LEAST**?

a) cheetah, lion, elk, pronghorn
b) cheetah, pronghorn, lion, elk
c) cheetah, elk, pronghorn, lion
d) elk, lion, pronghorn, cheetah

12.) The table below shows the number of miles four travelers have flown.

TRAVELER'S MILES

Name	Number of Miles
Harlan	5,875
Missy	4,083
Tamika	6,172
Randy	8,497

Who has flown the **LEAST** miles?

6

a) Harlan
b) Missy
c) Tamika
d) Randy

13.) The table below shows the population of four towns.

TOWN POPULATION

Town	Population
Maple Ridge	8,715
Silver Springs	4,270
Center City	6,294
Pine Valley	7,804

Which town has the **GREATEST** population?

a) Maple Ridge
b) Silver Springs
c) Center City
d) Pine Valley

14.) There are 807 students at Jaclyn's school. This number is **CLOSEST** to:

a) 600
b) 700
c) 800
d) 900

15.) A television set costs $248. This number is **CLOSEST** to:

a) $250
b) $275

c) $300
d) $350

16.) On the number line below, the number 3.2 is **CLOSEST** to which labeled point?

A   B   C D
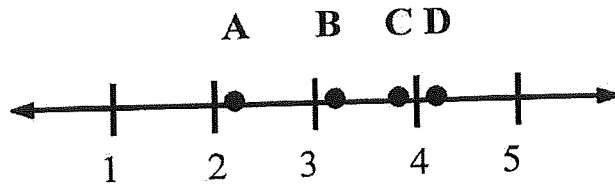
a) A
b) B
c) C
d) D

17.) On the number line below, the number $4\frac{2}{3}$ is **CLOSEST** to which labeled point?

A   B   C   D
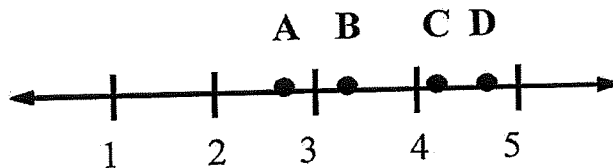
a) A
b) B
c) C
d) D

Models for Operations

18.) There are 2 cupcakes in a package. Mrs. Carroll bought 4 packages. Which number sentence could be used to find out how many cupcakes she bought?

a) $4 \div 2 = \square$

b) $4 + 2 = \square$

c) $4 \times 2 = \square$

d) $4 - 2 = \square$

19.) Jennifer has 24 crayons. She needs to put her crayons in boxes. Each box holds 8 crayons. Which number sentence could be used to find out how many boxes Jennifer will need?

a) $24 \div 8 = \square$

b) $24 \times 8 = \square$

c) $24 - 8 = \square$

d) $24 + 8 = \square$

20.) Write a story problem that can be solved using the number sentence
$$8 \times 6 =$$

_____

_____

_____

_____

21.) Write a story problem that can be solved using the number sentence
$$63 \div 9 =$$

_____

_____

_____

_____

Basic Facts

22.) Solve this problem: $5 \times 9 =$

    a) 30
    b) 40
    c) 45
    d) 55

23.) Solve this problem: $36 \div 9 =$

    a) 4
    b) 6
    c) 9
    d) 12

24.)
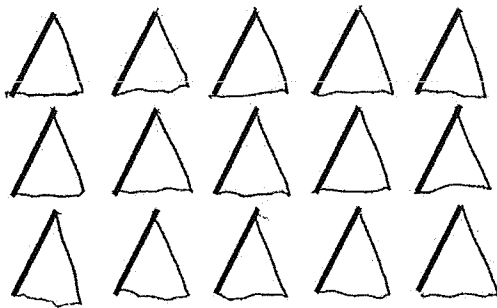
Which number sentence describes the triangles above?

    a) $3 + 5 = \square$
    b) $3 \times 5 = \square$
    c) $5 \div 3 = \square$
    d) $5 - 3 = \square$

Computation with Whole Numbers and Decimals

25.) Solve this problem: $48 - 29 = \underline{\hspace{1cm}}$

26.) Solve this problem: $3.78 + $4.69 = _____

Solve Word Problems

27.) The 56 students in the fifth grade were divided into 8 teams. Charlotte was on Team 5. How many students were on each team?

    a) 7
    b) 8
    c) 40
    d) 56

28.) Martin spent $2.60 on his lunch. Sandwiches cost $1.25. Milkshakes cost $0.65. How much **MORE** does a sandwich cost than a milkshake?

29.) Sue-Lee scored 93 points on a science test on Monday and 77 points on a science test on Friday. What was the difference between her two scores?

30.) Tamara read 197 pages of a library book on the weekend and 129 pages during the week. How many pages did she read altogether?

31.) Solve this problem then explain your thinking. Maxwell has 25 baseball trading cards to give away. If he gives them equally to 5 friends, how many cards will each friend get?

_____

_____

_____

_____

32.) Solve this problem then explain your thinking. Adrian bought 4 packs of apple juice. If there are 6 bottles of juice in each pack, how many bottles of apple juice did she buy?

_____

_____

_____

_____

Numerical Estimation Strategies

12

33.) Bob needs to subtract 195 from 2,613. To get a GOOD ESTIMATE of this difference, which expression would be BEST to use?

a) 2,600 – 200
b) 2,700 – 200
c) 2,700 – 100

Estimating Solutions to Problems

34.) Today Pamela is on page 195. For tomorrow's assignment she must read to page 237. ABOUT how many pages does she have left to read?

a) 30
b) 40
c) 50
d) 500

35.) Toni had $7.95. She spent $3.15. ABOUT how much money does she have left?

a) $3.00
b) $5.00
c) $12.00
d) $400.00

Time

36.) The Judds started working in the garden at 1:50. They worked for 2 hours and 15 minutes. At what time did they stop working?

a) 4:05
b) 3:05

c) 2:25
d) 11:35

Approximating Measures

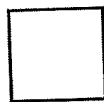37.) If Box A is 4 units long, **ABOUT** how long is Box B?

Box A

Box B

a) 5 units
b) 3 units
c) 2 units
d) 1 unit

38.) If the white shape covers and area of 12 square feet, **ABOUT** how many square feet would the shaded shape cover?
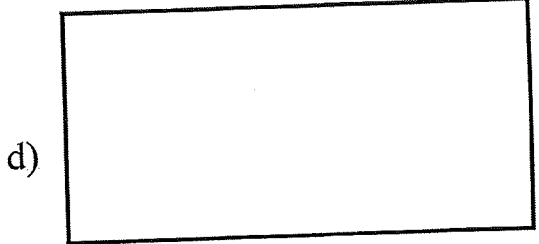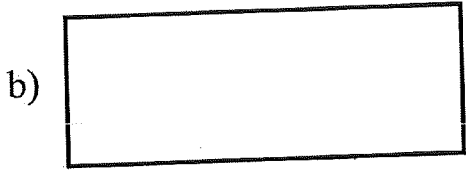
a) 9 square feet
b) 36 square feet

14

c) 72 square feet
d) 108 square feet

Customary and Metric Measures

39.) Use your ruler to determine which of the figures below has a perimeter of 14 centimeters.

a)

b)

c)

d)
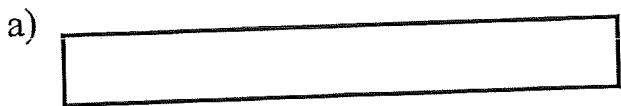
40.) The amount of milk in a glass would **BEST** be measured in

a) ounces
b) gallons
c) quarts
d) pounds

41.) Many students in Maple School walk to school. Which is a **REASONABLE** distance to walk to school?

a) 2 meters
b) 2 kilometers
c) 2 centimeters
d) 2 liters

Geometric Shapes and Properties

42.) Draw a pentagon. Then write one or two sentences to describe this figure.

43.) Draw a parallelogram. Then write one or two sentences to describe this figure.

Tables, Graphs, and Charts

44.) The chart below shows the popularity of amusement park rides during one day.

AMUSEMENT PARK RIDES

Ride	Number of Riders
Merry-Go-Round	460
Roller Coaster	842
Ferris Wheel	891
Bumper Cars	967

ABOUT how many people rode the Bumper Cars?

a) 500
b) 600
c) 900
d) 1,000

45.) Complete and label the **PICTOGRAPH** using the following information.

SAM'S T-SHIRTS

Color	Number of Shirts
Red	20
Blue	12
Green	8
White	16

17

$\blacktriangledown = 4$

46.) Complete and label the **BAR** graph using the following information.

SPEEDS OF ANIMALS

Animal	Speed (mph)
Cheetah	70
Pronghorn	60
Lion	50
Elk	45
Zebra	40

Speeds of Animals

Speed (mph) — vertical axis labeled 0, 10, 20, 30, 40, 50, 60, 70, 80

Animal — horizontal axis labeled Cheetah, Pronghorn, Lion, Elk, Zebra
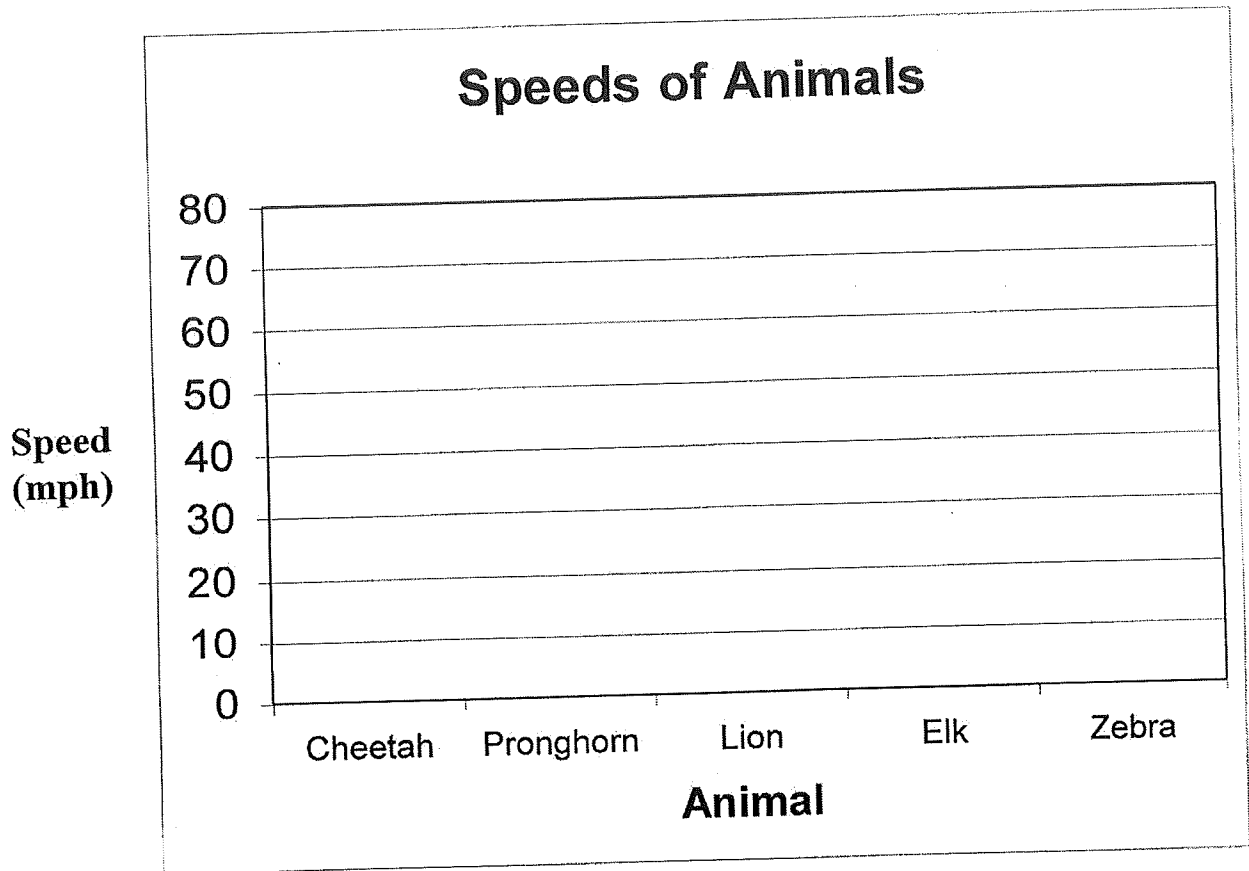
47.) The table shows the favorite book types of fourth and fifth graders.

TYPE OF BOOK	FOURTH GRADERS	FIFTH GRADERS
Adventure	24	31
Animals	6	7
Biography	11	13
Mystery	26	18
Sports	11	21

Which statement about the survey is **TRUE**?

a) Animal books were the most popular.
b) More fifth graders than fourth graders answered the survey.
c) More fourth graders than fifth graders chose biography books.
d) More than 30 students chose biography books.

Probability

48.) If Hank spins this spinner once, on which color is the arrow **MOST** likely to land?
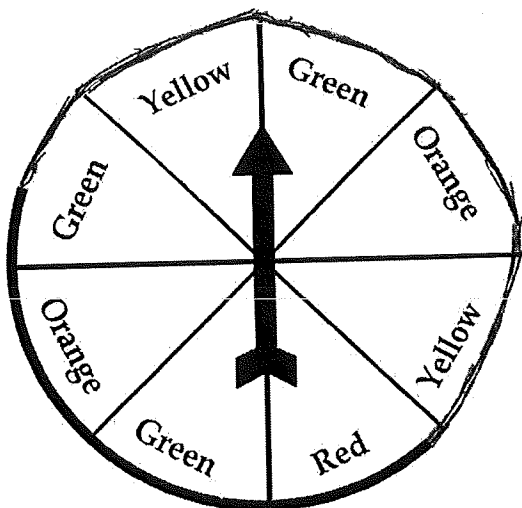
a) Yellow
b) Green
c) Orange

Patterns

49.) What is the next number in this pattern?

8, 12, 16, 20, 24, 28, _____

Write the number. Then write a sentence to explain why you chose this number.

_____

_____

50.) Draw the figure that should come next in the pattern. Write a sentence to explain how you decided what to draw.

●⌣■□●⌣■□●___

_____

_____

_____

_____

_____

Classification and Logical Reasoning

51.) Tom made a list of the height of several friends. He wants to change this list into 2 new lists:

- friends taller than 56 inches
- friends shorter than 56 inches

Write the new lists for Tom.

Tom's Original List		Shorter than 56 inches	Taller than 56 inches
Janet	55 inches		
Rhea	60 inches		
June	48 inches		
Carolyn	59 inches		
Felicia	49 inches		
Elise	63 inches		
Ginny	48 inches		
Jack	53 inches		
Brian	57 inches		
Howard	47 inches		
Ann	59 inches		

52.) Sort all 8 of these activities into 2 groups so that the activities in each group have something in common. Show how you grouped these activities by writing its name in the chart. Write a sentence that explains why you grouped them this way.

- playing tag
- playing Nintendo
- playing Monopoly
- walking the dog

- playing soccer
- eating dinner
- sleeping
- reading

Group 1	Group 2

Describe your rule for sorting here.

_____

_____

_____

_____

_____

Mathematical Applications

53.) Tory sells stuffed animals. She sells large stuffed animals for $9 and small stuffed animals for $4.