Grade 5

Summer Math Packet

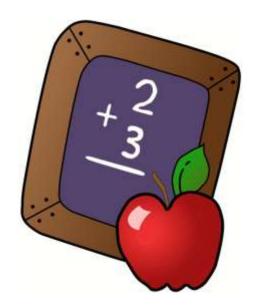
Grade 4 students entering Grade 5 in September 2015

This assignment is to be handed in no later than Friday, September 4, 2015.

Late work will not be accepted.

This assignment will be graded and included in the first marking period grades. Be sure to **show any work necessary** on a separate piece of paper and attach to the back of this packet.

Students re-registering, regardless of the date of registration, will be responsible for turning in this Summer Math Packet on time.



Math Skills Mastered in Fourth Grade:

Dear Parents,

Below is a list of skills that were taught and reviewed in 4th Grade. Please understand that your child must enter 5th Grade with complete knowledge of all these skills as they will not be reviewed.

- Addition and Subtraction with Regrouping
- Place Value
- Rounding to Millions
- Basic Multiplication and Division Facts
- Multiplication of 2,3, and 4 Digit Factors by 1 Digit Factor
- Multiplication of 2 and 3 Digit Factors by 2 Digit Factor
- Long Division with Remainders
- Factors, Multiples, and Patterns
- Fraction Equivalence and Comparisons
- Addition and Subtraction with Fractions (Common and Uncommon Denominators)
- Multiplying Fractions by Whole Numbers
- Relating Fractions and Decimals
- Two-Dimensional Figures
- Angles
- Measurement Conversions
- Perimeter and Area
- Multiple Step Word Problems (In all areas listed above)

Choose the correct answer.

- 1. The population of Texas is about 24,782,000. What is the value of the 4 in that number?
 - **A** 40,000,000
 - в 4,000,000
 - **c** 400,000
 - **D** 40,000
- **2.** Which number is the standard form of seventeen million, five hundred thousand, six hundred twenty-two?
 - **A** 17,005,622
 - в 17,050,622
 - **c** 17,500,622
 - **D** 18,500,622

- 3. A small arena seats 1,600 fans at a basketball game. If there are 20 sections in the arena, how many fans can sit in each section?
 - A 40 fans
 - **B** 80 fans
 - **c** 400 fans
 - **D** 800 fans
- 4. Christelle is helping to decorate a float for a parade. The float will have 2,500 flowers in 10 different colors with an equal number of flowers of each color. How many flowers of each color will the float have?
 - A 25 flowers
 - **B** 50 flowers
 - c 250 flowers
 - **D** 500 flowers

AG251

5. Fourteen adults and 42 students went on a field trip. The group was divided into teams with 7 people on a team. Which expression and answer tells the number of teams that were formed?

A
$$(42 - 14) \div 7$$
; 4 teams

B
$$42 - 14 \div 7$$
; 40 teams

c
$$(14 + 42) \div 7$$
; 8 teams

D
$$14 + 42 \div 7$$
; 20 teams

- **6.** What is the value of the expression $60 \div 6 (2 + 5)$?
 - **A** 3
 - в 13
 - **c** 14
 - **D** 20

- **7.** Charlie bought binoculars for \$62.96. Emily bought a flashlight for \$21.45. How much did they spend on the two items?
 - **A** \$83.31
 - в \$83.41
 - **c** \$84.31
 - **D** \$84.41
- **8.** Carter spent \$84.15 on ski gloves and \$49.98 on sun glasses. How much did Carter spend in all?
 - **A** \$134.13
 - в \$133.13
 - **c** \$133.03
 - **D** \$124.13

9. What are the next two numbers in the pattern?

2, 6, 18, 54, _____, ____

- **A** 108, 216
- в 162, 486
- **c** 152, 456
- **D** 162, 324
- **10.** Which describes the following pattern?

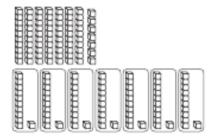
1, 7, 49, 343, . . .

- A Add 6
- B Add 7
- c Multiply by 6
- Multiply by 7

- **11.** Jason spent \$9.48 at the book fair. How much did he spend, rounded to the nearest dollar?
 - **A** \$9.00
 - в \$9.40
 - **c** \$9.50
 - **D** \$10.00
- **12.** Sofia bought 2.85 pounds of grapes at the market. About how many pounds of grapes did Sofia buy rounded to the nearest pound?
 - ▲ about 2 pounds
 - **B** about 2.8 pounds
 - c about 2.9 pounds
 - **D** about 3 pounds

AG253

13. Chloe has 77 books to place on bookshelves. Each shelf holds 11 books. Chloe uses this model to find the number of shelves she will need.



Which computation does the model show?

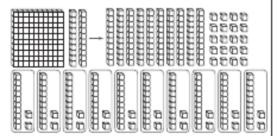
A
$$77 \div 10 = 7 \text{ r} 7$$

B
$$77 - 11 = 66$$

c
$$77 \div 11 = 7$$

D
$$77 - 7 = 70$$

14. Elijah uses base-ten blocks to find the number of ten-dollar bills in \$120.



Which computation does the model show?

B
$$120 \div 12 = 10$$

c
$$120 \div 5 = 24$$

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D
$$120 - 10 = 10 \times 11$$

15. The deck on Mr. Garcia's home measures 8.09 meters. Which is the correct word form for the decimal 8.09?

16. What is the value of the underlined digit in the decimal 23.16?

- **17.** There are 730 people at the school play. Which decomposes 730 into two factors?
 - A 73×1
 - **B** 73×10
 - **c** 73×100
 - **D** $73 \times 1,000$
- **18.** A grocery store handed out 9,000 balloons on its grand opening celebration. Which decomposes 9,000 into two factors?
 - **A** 9×1.000
 - **B** 9 × 100
 - $\mathbf{c} 9 \times 10$
 - \mathbf{p} 9 \times 1

- **19.** Diego sees a pair of jeans on sale for \$48.87. The original price of the jeans was \$65.35. How much will Diego save by buying the jeans on sale?
 - **A** \$17.55
 - в \$17.48
 - **c** \$16.52
 - **D** \$16.48
- **20.** Sara has \$50.00 to spend on art supplies. She spends \$37.29. How much money does Sara have left?
 - A \$12.29
 - в \$12.71
 - **c** \$22.71
 - **D** \$23.81

- **21.** A portion size in one restaurant is supposed to weigh less than 4.5 ounces. Which of the portions below is **less than** 4.5 ounces?
 - A 5.05 ounces
 - **B** 4.51 ounces
 - **c** 4.50 ounces
 - **D** 4.15 ounces
- 22. Mia and Kelly are both knitting scarves. Mia's scarf is 23.39 inches long. So far, Kelly's scarf is longer than Mia's scarf. Which could be the length of Kelly's scarf?
 - A 23.4 inches
 - **B** 23.39 inches
 - **c** 23.3 inches
 - **D** 23.09 inches

23. Which list shows the operations in the correct order to find the value of the expression?

$$3 + 12 \div (2 - 1)$$

- A add, divide, subtract
- **B** divide, add, subtract
- c subtract, add, divide
- **D** subtract, divide, add
- **24.** Charlene is 5.25 feet tall. Which is the expanded form of decimal 5.25?

$$\mathbf{A}$$
 5 + 0.2 + 0.5

$$B 5 + 0.2 + 0.25$$

$$\mathbf{c}$$
 5 + 0.2 + 0.05

$$\mathbf{D}$$
 5 + 0.2 + 0.005

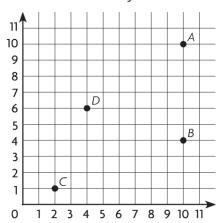
- 25. Karl earned \$75.00 last week raking leaves. He earned \$48.50 this week. How much more did Karl earn last week than this week?
 - **A** \$123.50
 - в \$37.00
 - **c** \$36.50
 - **D** \$26.50



Choose the correct answer.

Use the grid for 1-4.

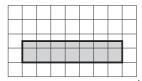
This city has four libraries. The grid shows the location of each library.



- **1.** Which ordered pair tells the location of Library D?
 - **A** (2, 6)
- **c** (6, 4)
- **B** (4, 6)
- **D** (6, 6)
- **2.** Which ordered pair tells the location of Library B?
 - **A** (4, 4)
- **c** (10, 4)
- **B** (4, 10)
- **D** (10, 10)

- **3.** Which ordered pair tells the location of Library C?
 - **A** (1, 1)
 - **B** (1, 2)
 - **c** (2, 1)
 - **D** (2, 2)
- **4.** Which best describes how to move from Library A to Library B?
 - A Move 6 units up.
 - **B** Move 6 units down.
 - **c** Move 6 units to the right.
 - **D** Move 10 units down.

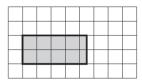
5. Mr. Becker drew this model of his garden. Each square has an area of 8 square yards.



1 square = 8 square yards

What is the area of Mr. Becker's garden?

- A 56 square yards
- **B** 64 square yards
- c 84 square yards
- **D** 112 square yards
- **6.** The drawing of an outside deck is shown. Each square has an area of 12 square feet.

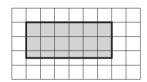


1 square = 12 square feet

What is the area of the deck?

- A 84 square feet
- B 96 square feet
- c 108 square feet
- **D** 116 square feet

7. Mrs. Jackson's farm has a pen for her horses. The model of the pen is shown. Each square has an area of 4 square meters.



1 square = 4 square meters

What is the area of the horse pen?

- A 72 square meters
- **B** 60 square meters
- c 48 square meters
- **D** 36 square meters
- **8.** LeeAnn is cutting ribbon into $\frac{1}{4}$ -foot pieces. How many pieces can she cut from a ribbon that is 4 feet long?
 - Δ 4
 - **B** 8
 - **c** 12
 - **D** 16

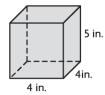
- **9.** Dave has 3 cups of trail mix to share with his friends. How many $\frac{1}{3}$ -cup portions can he make?
 - **A** 6
 - в 9
 - **c** 10
 - **D** 12

- **10.** Maria has a pitcher filled with 5 cups of hot cocoa. She pours out $\frac{1}{2}$ -cup servings until the pitcher is empty. How many $\frac{1}{2}$ -cup servings does she make?
 - A 4
 - **B** 5
 - **c** 7
 - **D** 10

- **11.** A hobby store has 2 boxes of paint sets with 14 paint sets in each box. If there are 8 jars of paint in each set, how many jars of paint are there in all?
 - **A** 288 jars
 - **B** 280 jars
 - **c** 224 jars
 - **D** 112 jars
- 12. There are 3 after-school sports clubs in each elementary school. Each club has 17 members. If there are 4 elementary schools in the town, how many members are there in all of the sports clubs?
 - A 68 members
 - **B** 84 members
 - c 194 members
 - **D** 204 members

- **13.** A store has 5 cartons of eggs. Each carton holds 16 dozen eggs. How many eggs are there in all?
 - A 192 eggs
 - **B** 520 eggs
 - **c** 960 eggs
 - **D** 1,080 eggs

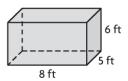
14. Cesar is packing cube-shaped jewelry boxes into the bottom layer of a larger box with the dimensions shown. Each edge of the small jewelry box is 1-inch in length.



If there are no gaps, how many of the small boxes will fit in the bottom layer of the larger box?

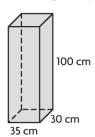
- A 8 small boxes
- **B** 16 small boxes
- c 20 small boxes
- **b** 40 small boxes

15. Ruth and Beatrice are camping. Their tent is in the shape of this rectangular prism.



What is the area of the floor of the tent?

- A 240 square feet
- **B** 130 square feet
- c 80 square feet
- **D** 40 square feet
- **16.** Ji is building a plant stand in the shape of this rectangular prism.



What is the area of the base of the plant stand?

- ▲ 3,500 square centimeters
- **B** 3,000 square centimeters
- c 1,050 square centimeters
- 900 square centimeters

- **17.** Mrs. Mancini baked a loaf of bread. Her family ate $\frac{1}{2}$ of the loaf for breakfast and $\frac{1}{6}$ of the loaf for lunch. What part of the loaf was eaten by the end of lunch?
 - $\mathbf{A} \frac{1}{8}$
 - **B** $\frac{1}{6}$
 - $c \frac{3}{6}$
 - **D** $\frac{4}{6}$
- **18.** Leon did $\frac{2}{3}$ of his homework before dinner and $\frac{1}{6}$ of his homework after dinner. What part of his homework has he finished so far?
 - **A** $\frac{6}{5}$
 - **B** $\frac{5}{6}$
 - **c** $\frac{4}{6}$
 - **D** $\frac{1}{3}$

- **19.** Jolene needs $\frac{3}{4}$ cup of oil and $\frac{1}{8}$ cup of water for a recipe. How many cups of liquid ingredients does Jolene need?
 - $\mathbf{A} \frac{4}{8} \text{ cup}$
 - **B** $\frac{5}{8}$ cup
 - **c** $\frac{6}{8}$ cup
 - $\mathbf{D} \frac{7}{8} \text{ cup}$
- **20.** Tom hiked $\frac{1}{2}$ mile before eating a snack and $\frac{3}{8}$ mile after his snack. How much farther did Tom hike before eating the snack than after eating the snack?
 - $\mathbf{A} \frac{1}{8}$ mile
 - **B** $\frac{1}{6}$ mile
 - $c \frac{3}{6}$ mile
 - **D** $\frac{7}{8}$ mile

- **21.** Franco had $\frac{5}{6}$ of his science project left to do. He completed $\frac{5}{12}$ more of the project today. What fraction of the science project is left to do?
 - $\mathbf{A} \quad \frac{5}{6}$
 - $\mathbf{B} \frac{11}{12}$
 - **c** $\frac{9}{12}$
 - **D** $\frac{5}{12}$
- **22.** Hannah and Faith are both collecting state quarters. Hannah has completed $\frac{7}{10}$ of the collection. Faith has completed $\frac{3}{5}$ of the collection. How much more of the collection has Hannah completed?
 - **A** $\frac{1}{10}$
 - **B** $\frac{2}{10}$
 - **c** $\frac{2}{5}$
 - **D** $\frac{10}{10}$

- 23. Which shows the division problem
 1 ÷ 6 written as a fraction or a mixed number?
 - **A** $\frac{6}{1}$
 - **B** $\frac{6}{6}$
 - **c** $\frac{1}{6}$
 - $D \frac{1}{12}$
- **24.** A family divides 3 round loaves of rye bread equally among 4 people. Which fraction shows how much bread each person gets?
 - **A** $\frac{1}{4}$

 - $\mathbf{c}^{\frac{2}{2}}$
 - **D** $\frac{4}{3}$
- **25.** Kristen wants to make 4 picture frames. She needs $\frac{5}{9}$ yard of ribbon to make each frame. How much ribbon will Kristen need to make all the picture frames?
 - $\mathbf{A} \frac{4}{9}$ yard
 - **B** less than $\frac{5}{9}$ yard
 - \mathbf{c} more than $\frac{5}{9}$ yard
 - **D** $\frac{5}{9}$ yard

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Chapters 1–5 Task B

Sculpting Hands

The art department at Mark's school is buying supplies for the pottery club. The table shows the prices of the supplies it needs.

A	The art department has a \$2,000 budget for
	supplies. They want to buy 45 boxes of clay,
	24 tool kits, 14 containers of glazes, and 5 dozen
	sponges. Is the cost of the supplies under the
	\$2,000 budget limit? Explain your answer.

Price List		
Supplies Price		
Clay	\$30 box	
Tool Kits	\$15	
Glazes	\$12/container	
Sponges	\$9/dozen	

B	If the answer in Part A is yes, what other supplies could the art
	department add to the order and still spend under \$2,000?
	If the answer is no, what should the department remove from
	the order?

Suppose the original budget was \$400 less. Which supplies can be removed from the list to save at least \$400? Explain your answer.

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Chapters 6-9 Task A

A Visit to the Zoo

The zoo is one of Ed's favorite places to visit. The table shows some of his favorite exhibits and how far they are from the zoo parking lot.

A	Are any of Ed's favorite animal exhibits,
	shown in the table, less than $\frac{1}{2}$ mile to the
	parking lot? Explain how you know?

Distance from Parking Lot		
Exhibit	Distance (miles)	
Monkey	² / ₅ mile	
Seal	$\frac{3}{4}$ mile	
Large Cat	$\frac{2}{3}$ mile	
Elephant	5 12 mile	

A	Are any of the places shown in the table the same distance
U	from the parking lot? Explain how you know.

G	Ed is going to start his visit by walking to the exhibit that is the greatest distance from the parking lot. Which exhibit will he start with? Explain.

Name	_

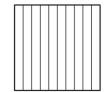
Chapters 6–9 Task D

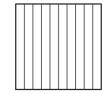
Paths with Different Views

A fourth grade class went to the zoo. While at the zoo, visitors can walk along the main walkway or the nature trail.

A Lee and Daniel decide to walk along the main walkway. The main walkway is more than 2 miles and less than 3 miles. Shade the model to show the distance Lee and Daniel could have walked.







B Describe the distance Lee and Daniel walked as a mixed number, a fraction, and a decimal.

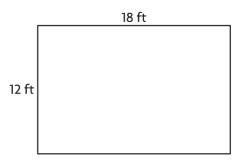
Max and Chris decide to walk along the nature trail. The nature trail is $\frac{15}{100}$ of a mile farther than the distance Lee and Daniel walked along the main walkway. How many miles did Max and Chris walk? Write your answer as a mixed number

Name	_ Chapters 10–13
	Task D

How Does Your Garden Grow?

Mrs. Jefferson wants to enlarge her rectangular garden by adding a new rectangular section that is 48 square feet.

A The size of Mrs. Jefferson's garden is shown below. Draw and label the new section of the garden. Use only whole numbers for the length and width of the new rectangle. Label the length and width of the sides of the new section of the garden.



- **B** Mrs. Jefferson wants to put a fence around the entire garden. How many feet of fencing will she need? Show your work.
- What is the area of Mrs. Jefferson's entire garden? Explain.