

Answers 2018

Grade 5 Mid-Year Assessment Study Guide

Your child will take the Grade 5 Mid-Year Assessment during class on February 15th 2017. Should school be closed due to inclement weather the assessment will be given on the next school day. The entire Mid-Year Assessment will only count as one **quiz** grade and is **not a factor in math placement for next year**. The purpose of this assessment is to give formative information on each student's progress, provide students the opportunity to review concepts since the beginning of the year, and to provide children with the experience of a cumulative assessment.

This guide provides problems from each topic in a manner they may encounter questions on the assessment. It would be helpful for students to use this as a review.

Answers to this study guide, as well as the guide itself, will be posted on the LMS Math Department web site. The guide will be posted immediately and the answers will be posted in several days.

Math Dept. Site: <https://www.mtsd.k12.nj.us/domain/933>

How can I help my child?

- Review any topics that your child had difficulty, this would be an excellent place to start.
- Encourage your child to do problems from the Study Guide. It is best for the student to do a few problems each day, rather than many at one given time.
- Problems from the Topic Test at the end of each Topic in the enVision textbook are another resource.
- Encourage your child to ask specific questions. Your child's teacher is an excellent resource. Come to *the in-class review session (Tuesday, February 13th)* with questions they don't understand or need/want more practice with.
- **Relax. Encourage your child to relax.** This assessment is to inform your child's teacher and you of your child's progress, as well as to provide them the experience of a cumulative assessment.

The general topics on the Mid-Year Assessment are:

Place Value & Adding/Subtracting Decimals
TOPICS 1 & 2

Multiplying Whole Numbers
TOPIC 3

Division with Whole Numbers
TOPICS 4 & 5

Adding & Subtracting Fractions & Mixed Numbers
TOPICS 9 & 10

Wishing your child the best success,
The Fifth Grade Math Team

TOPIC 1 Place Value

I. Write the number in Word Form:

1) 7,123 seven thousand, one hundred twenty-three

2) 18,345 eighteen thousand, three hundred forty-five

II. Write the number in Standard Form:

1) $8,000,000 + 300 + 9$ 8,000,309

2) $60,000,000 + 10,000 + 20 + 3$ 60,010,023

III. Write the number in Expanded Form:

1) 85,000,011,000 80,000,000,000 + 5,000,000,000 + 10,000 + 1,000

2) 1,000,102,200 1,000,000,000 + 100,000 + 2,000 + 200

IV. Write the decimal as a fraction or a mixed number:

1) 3.2 $3 \frac{1}{5}$

2) 0.7 $\frac{7}{10}$

V. Write the fraction or mixed number as a decimal:

1) $2 \frac{2}{5}$ 2.4

2) $\frac{389}{500}$ 0.778

Word Problem:

Walter has \$200. Sally has 10 times as much money as Walter. How much money does Sally have?

Sally has \$2,000

TOPIC 2 Adding & Subtracting Decimals

- 1) Add: $27.80 + 3.004 =$ **30.804**
- 2) Subtract: $43.95 - 7.506 =$ **36.444**
- 3) Add: $17.49 + 21 =$ **38.49**
- 4) Subtract: $17.89 - 9.747 =$ **8.143**
- 5) Estimate: $19.9 + 17.03 =$ **20 + 17 = 37**

Word Problem:

Kerry bought a loaf of bread for \$3.49, a jar of preserves for \$2.29 and a jar of peanut butter for \$3.89. Round to nearest dollar and determine about how much Kerry spent. Write an equation to show your work.

\$3 + \$2 + \$4 = \$9

Topic 3: Multiplying Whole Numbers

1) Use patterns and properties to solve mentally.

- a.) $70 \times 20 =$ **1,400**
- b.) $7,000 \times 80 =$ **560,000**
- c.) $200 \times 50 =$ **10,000**
- d.) $7,000 \times 6 =$ **42,000**

- 2) Each of the 35 members of the baseball team is required to participate in the candy bar fundraiser. The coach estimates that each member can sell 28 candy bars. Estimate how many candy bars they will sell. (Show your work!)

Write the complete equation you used to estimate:

$$\underline{\underline{40 \text{ players} \times 30 \text{ bars} = 1200 \text{ bars}}}$$

$$\underline{\underline{\text{or } 30 \text{ players} \times 30 \text{ bars} = 900 \text{ bars}}}$$

- 3) Multiply:

$$455 \times 4 = \underline{\underline{1,820}}$$

- 4) Multiply

$$86 \times 7 = \underline{\underline{602}}$$

- 5) Multiply

$$25 \times 46 = \underline{\underline{1,150}}$$

- 6) Multiply

$$236 \times 71 = \underline{\underline{16,756}}$$

7) Suppose a local charity collected 216 cans of food every day for 18 days. How many cans of food did the charity collect in all?

Remember to include the label “cans”

3, 888 cans
(units)

8) Write 5^3 in expanded form

expanded form: **$5 \times 5 \times 5$**

9) Write the value of 3^4

Value : **$3 \times 3 \times 3 \times 3 = 81$**

10) Write $7 \times 7 \times 7 \times 7 \times 7$ in exponential notation

Exponential Notation: **7^5**

Write a complete estimated equation.

- 6) Mary is putting tiles on her kitchen floor. If she has 1,663 tiles to place in 19 rows, about how many tiles will she need to place in each row?

$1,600 \div 20 = 80$ [NOT $1,600 \div 16 = 100$ because it changes the place value.]

Solve. Show all steps.

- 7) There are 16 ounces in a pound. If you have 448 pounds of chocolate, how many ounces of chocolate would you have?

7,168 ounces
(label)

Remember to include the units “ounces”

Note to parents:

Students should multiply to find the total number of ounces.

For questions 8 through 10, divide. Show all steps. Write the remainder as a fraction.

8) $128 \div 16 =$ _____ **8**

9) $234 \div 55 =$ _____ **$4 \frac{14}{55}$**

10) $\$4,418 \div 47 =$ _____ **\$94**

Topic 9-10: Adding & Subtracting Fractions & Mixed Numbers

Directions.

1)

The table to right shows the number of organisms Arjun counted in a square meter in his backyard. What fraction of the organisms listed are ants?

Ants	15
Grasshoppers	2
Worms	4

$$\frac{5}{7} \text{ (reduced)}$$

For Questions 2-5 Estimate the sum or difference of the fractions by replacing each fraction with 0, $\frac{1}{2}$ or 1. Show the complete estimated equation.

$$2) \frac{1}{8} + \frac{8}{9} = \underline{0 + 1 = 1}$$

$$3) \frac{9}{11} - \frac{1}{7} = \underline{1 - 0 = 1}$$

$$4) \frac{8}{15} + \frac{7}{13} = \underline{\frac{1}{2} + \frac{1}{2} = 1}$$

$$5) \frac{9}{10} + \frac{4}{9} = \underline{1 + \frac{1}{2} = 1\frac{1}{2}}$$

For Questions 6-9 find the sum (add) of the fractions. Be sure to simplify answers.

$$6) \frac{1}{6} + \frac{2}{3} = \underline{\frac{5}{6}}$$

$$7) \frac{2}{5} + \frac{3}{4} = \underline{1\frac{3}{20}}$$

$$8) 2\frac{2}{7} + 3\frac{3}{14} = \underline{5\frac{1}{2}}$$

$$9) 3\frac{7}{9} + 5\frac{4}{7} = \underline{9\frac{22}{63}}$$

For Questions 10-13 find the difference (subtract) of the fractions. Be sure to simplify answers.

$$10) \frac{3}{4} - \frac{1}{3} = \underline{\frac{5}{12}}$$

$$11) 3\frac{8}{11} - 2\frac{2}{5} = \underline{1\frac{18}{55}}$$

$$12) 12\frac{2}{7} - 3\frac{11}{14} = \underline{8\frac{1}{2}}$$

$$13) 8\frac{4}{5} - 5\frac{1}{3} = \underline{3\frac{7}{15}}$$

14) Samantha cuts a board $20\frac{3}{4}$ inches long from a board that is 60 inches long. How long is the piece that is left over after she cuts?

_____ $39\frac{1}{4}$ inches _____

Remember to include inches

15) Renav is gluing a ribbon around a picture frame that is $12\frac{1}{4}$ inches tall and $8\frac{1}{2}$ inches wide. How much ribbon does Renav need to glue once around the picture frame?

_____ $41\frac{1}{2}$ inches _____

Remember to include inches

16) Theo does his math homework and he gets an answer of $\frac{18}{42}$. Katelyn explains to him that this fraction is not simplified (reduced). She shows him how to completely simplify his answer correctly. What is the completely simplified fraction that Katelyn shows?

_____ $\frac{3}{7}$ _____

17)

The table to right shows the amount of ingredients for a certain recipe. All combined, how much more flour is used than sugar?

Flour	$2\frac{1}{2}$ cups
Sugar	$1\frac{3}{4}$ cups
Eggs	4 cups
Butter	1 cup
Milk	1 cup

$\frac{3}{4}$ cups more flour (remember to include “cups”)
