

Rising 7th Graders Summer Math Packets

Dear Parents,

Rockdale County Public Schools is committed to providing the best math education possible for your child. Due to the cumulative nature of mathematics, **in order for** your child to be successful in the coming school year, he/she must possess mastery of many concepts from his/her previous math classes. For this reason, we have created a summer math packet to ensure your child is up to date on his/her prerequisite math skills.

1. Complete the practice problems embedded in the summer packet **for the students who will be enrolled in 7th grade during the Fall of 2020**. The use of the Braining Camp manipulatives can be found in ClassLink on their laptop.



2. The use of www.khanacademy.org can be helpful for students to use. Type in the learning target topic(s) in the search menu. Here, your son/daughter will find tutorials and extra practice problems. Have him/her watch the tutorials and do the extra practice problems. This website will let your child know if he/she is doing the work correctly.

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Week 1

Skill: Operations with Fractions - Dividing
(MGSE6.NS.1)

Learning Targets:

✓ I can divide fractions by fractions.

Instructional Videos: Watch the videos below for additional help with the prerequisite skills (press Ctrl and click to follow the link).

[Use Models for Division of Fractions by Fractions](#)

[Divide Fractions by Fractions: Using the Common Denominator](#)

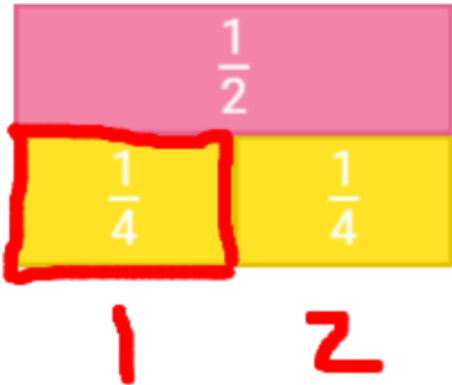
[Divide Mixed Numbers by Fractions: Using Models](#)

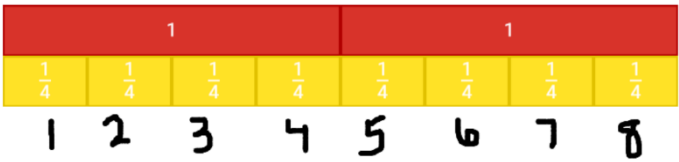
[Interpret Remainders when Dividing Using Models](#)

[Divide Fractions by Fractions: Using the Reciprocal](#)

[Divide Mixed Numbers: Multiplying by the Reciprocal](#)

Practice Problems: Show your work below or on a separate sheet of paper. Use Brainin Camp to assist with the modeling.

Problem	Fraction Model	Answer	Multiplication Check
$\frac{1}{2} \div 2$		$\frac{1}{2} \div 2 = \frac{1}{4}$	$\frac{1}{4} \times 2 = \frac{2}{4} = \frac{1}{2}$
$\frac{1}{3} \div 2$			
$\frac{1}{2} \div 5$			
$\frac{1}{4} \div 2$			
$\frac{1}{6} \div 2$			

$2 \div \frac{1}{4}$	<p>How many groups of $\frac{1}{4}$ are in 2?</p> 	$2 \div \frac{1}{4} = 8$	$8 \times \frac{1}{4} = \frac{8}{4} = 2$
$3 \div \frac{1}{2}$			
$4 \div \frac{1}{4}$			
$2 \div \frac{1}{10}$			
$2 \div \frac{1}{8}$			
$\frac{1}{5} \div \frac{2}{3}$			
$\frac{1}{4} \div \frac{3}{8}$			
$\frac{1}{5} \div \frac{2}{3}$			
$\frac{4}{5} \div \frac{1}{2}$			
$1\frac{1}{2} \div \frac{1}{4}$			
$2 \div 1\frac{1}{8}$			
$2\frac{2}{5} \div 2\frac{5}{8}$			
$1\frac{3}{4} \div 2\frac{2}{5}$			

Week 2

Prerequisite Skill: Operations with Fractions - mixed numbers to improper vice versa (MGSE4.NF.3c)

Learning Targets:

- ✓ I can convert an improper fraction to a mixed number.
- ✓ I can convert a mixed number to an improper fraction.

Instructional Videos: Watch the videos below for additional help with the prerequisite skills (press Ctrl and click to follow the link).

[Converting Improper Fractions to Mixed Numbers](#)

[Change an Improper Fraction to Mixed Number](#)

[Convert Mixed Number into Improper Fractions](#)

Practice Problems: Show your work below or on a separate sheet of paper.

Write each improper fraction as a simplified mixed number.

1. $\frac{9}{4}$

2. $\frac{18}{5}$

3. $\frac{31}{6}$

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

5. $\frac{40}{11}$

6. $\frac{81}{2}$

Write each mixed number as a simplified improper fraction.

1. $2\frac{2}{3}$

2. $4\frac{3}{16}$

3. $5\frac{1}{2}$

4. $1\frac{6}{7}$

5. $3\frac{5}{8}$

6. $33\frac{1}{3}$

Week 3

Prerequisite Skill: Operations with Decimals (MGSE6.NS.3)

Learning Targets:

- ✓ I can fluently add multi-digit decimals.
- ✓ I can subtract multi-digit decimals.

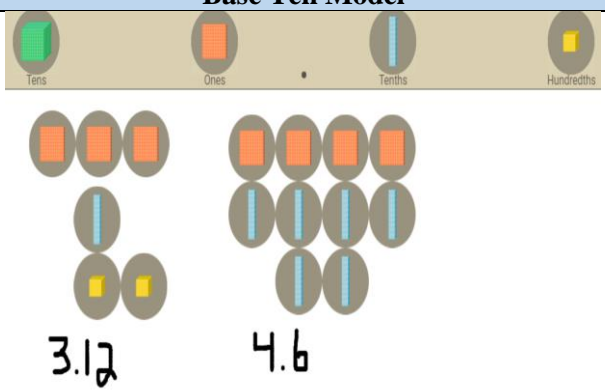
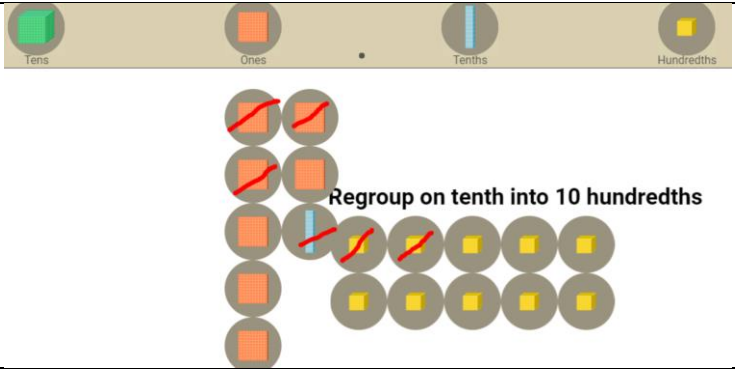
Instructional Videos: Watch the videos below for additional help with the prerequisite skills (press Ctrl and click to follow the link).

[Adding Decimals](#)

[Subtracting Decimals](#)

[Adding and Subtracting Decimals Song](#)

Practice Problems: Show your work below or on a separate sheet of paper. Use Braining Camp to assist with the modeling.

Problem	Base Ten Model	Answer
$3.12 + 4.6$		$3.12 + 4.6 = 7.72$
$7.2 - 3.12$		$7.2 - 3.12 = 4.08$
$8.21 + 11.021$		
$6.04 - 3.2$		
$5.012 + 3.5$		
$1.25 - 0.73$		
$0.123 + 5.7$		
$7.09 - 4.12$		
$1.2 + 4.56$		

$10.23 - 8.23$		
$102.31 + 113.6$		
$46.93 - 12.8$		
$1123.2 + 723.043$		
$124.462 - 109.01$		

Week 4

Prerequisite Skill: Operation with Decimals (MGSE6.NS.3)	Learning Targets: <ul style="list-style-type: none">✓ I can multiply decimals.✓ I can divide decimals.
Instructional Videos: Watch the videos below for additional help with the prerequisite skills (press Ctrl and click to follow the link). Multiplying Decimals Dividing Decimals	
Practice Problems: Show your work below or on a separate sheet of paper. <ol style="list-style-type: none">1. 5.78×4.32. 23.7×6.93. 94.26×0.34. 152.16×1.25. 87.1×4.86. $58.31 \div 12.54$7. $176.234 \div 23.56$8. $90.1 \div 10.1$9. $6480.23 \div 436.29$10. $74.6 \div 201.24$	

Week 5

Prerequisite Skill: Ratios (MGSE6.RP.3a)	Learning Targets: ✓ I can solve ratio problems using a table.
Instructional Videos: Watch the videos below for additional help with the prerequisite skills (press Ctrl and click to follow the link). Ratios Comparison Model Find Missing Values in Ratio Problems using a Table	
Practice Problems: Show your work below or on a separate sheet of paper. <ol style="list-style-type: none">1. A classroom had 35 students. If the ratio of boys to girls was 5:2, how many girls were in the class?2. A student finished 8 of her homework problems in class. If the ration of problems she finished to problems she still had left was 4:1, how many homework problems did she have total?3. Adam had 91 dollars. If he spent 21 dollars on new books, what is the ratio of money he still has to money he's spent?4. The ratio of white chocolate to dark chocolate sold at a candy shop was 4:3. If there were 20 bars of white chocolate sold, how many bars of dark chocolate were sold?5. A fast food restaurant sells two sizes of fries, small and large. On Friday they sold 81 fries total. If 9 of the fries sold were small, what is the ratio of large fries sold to small fries sold?6. Tom had 54 songs on his MP3 player. If he deleted 9 songs, what is the ratio of songs he kept to songs he deleted?7. At an ice cream shop the ratio of sugar cones sold to waffle cones sold is 5:4. If there are 45 sugar cones sold, how many waffles cones would be sold?8. The ratio of red cars to blue cars in a parking lot was 5:3. If there were 40 red cars, how many blue cars were there?9. During Christmas a book store sold 72 books. If the ratio of books to bookmarks sold was 9:2, how many bookmarks did the store sell?10. Fred is making a fruit salad. The ratio of cups of peaches to cups of cherries is 2 to 3. How many cups of peaches will Fred need to make 60 cups of fruit salad?	

Week 6

Prerequisite Skill: Ratios (MGSE6.RP.3c)	Learning Targets: <ul style="list-style-type: none">✓ I can find the percent of a number as a rate per 100.✓ I can find the whole when given a percent and a part.✓ I can find discount prices on sale items.
Instructional Videos: Watch the videos below for additional help with the prerequisite skills (press Ctrl and click to follow the link). Find the part when the percent and total are known Find the total when the percent and part are known	
Practice Problems: Show your work below or on a separate sheet of paper. <ol style="list-style-type: none">1. If the original price of a calculator is \$95, and it is discounted by 25%, what is the amount of the discount and the sale price?2. 25% of what number is 50?3. A sports jacket is on sale at 35% off, if the original price is \$140, what is the sale price?4. 5% of what number is 12?5. How much is 20% of 100?6. What is 95% of 180?7. Explain how you calculate a discount of 20%.8. You are buying a DVD that is on sale for \$15. If it was discounted at 10% off, what was the original price of the DVD?	