

Brandon Valley School District  
District Learning Plan  
March 23-27, 2020

Grade 4 Math



## Brandon Valley School District Distance Learning Plan

LESSON/UNIT: Math Review-Numbers/Operations

SUBJECT/GRADE: Math/4th

DATES: March 23-27, 2020

<p>What do students need to do?</p> <p><u><a href="#">PART ONE link to BV instructional video for week of March 23-27, 2020</a></u></p> <p><u><a href="#">PART TWO link to BV instructional video for week of March 23-27, 2020</a></u></p>	<p>Students may print out worksheets listed below or write on lined or unlined paper with page number written at the top.</p> <p>Monday (3/23): Complete chapter 7 review-Pattern and Sequences</p> <p>Tuesday (3/24): Complete Chapter 8 review</p> <p>Wednesday (3/25): Complete equivalent fraction Worksheet</p> <p>Thursday (3/26): Complete Simplest form worksheet</p> <p>Friday (3/27): Complete Compare and order fractions</p>
<p>What do students need to bring back to school?</p>	<p>Monday through Friday work completed.</p>
<p>What standards do the lessons cover?</p>	<p><b>4.NF.1</b> - Explain why a fraction <math>a/b</math> is equivalent to a fraction <math>(n \times a)/(n \times b)</math> by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions.</p> <p><b>4.NF.2</b> - Compare two fractions with different numerators and different denominators, by creating common denominators or numerators, or by comparing to a benchmark fraction such as <math>1/2</math>. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols <math>&lt;</math>, <math>&gt;</math>, <math>=</math>, and justify the conclusions.</p> <p><b>4.OA.5</b> - Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself. For example, given the rule "Add 3" and the starting number is 1, generate terms in the resulting sequence and observe that the terms appear to alternate between odd and even numbers. Explain informally why the numbers will continue to alternate in this way.</p> <p><b>4.OA.3</b> - Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36).</p> <p><b>4.OA.4</b> - Using whole numbers in the range 1–100. a. Find all factor pairs for a given whole number. b. Recognize that a whole number is a multiple of each of its factors. c. Determine whether a given whole number is a multiple of each of a given one-digit number. d. Determine whether a given whole number is prime or composite.</p>
<p>What materials do I need? What extra resources can I use?</p>	<p>Lesson on equivalent fractions - <a href="https://www.khanacademy.org/math/arithmetic/fraction-arithmetic/arith-review-visualizing-equiv-frac/v/equivalent-amount-of-pizza">https://www.khanacademy.org/math/arithmetic/fraction-arithmetic/arith-review-visualizing-equiv-frac/v/equivalent-amount-of-pizza</a></p> <p>Lesson on simplifying fractions - <a href="https://www.mathsisfun.com/simplifying-fractions.html">https://www.mathsisfun.com/simplifying-fractions.html</a></p> <p><a href="https://www.youtube.com/watch?v=1SOmHH1mwe8">https://www.youtube.com/watch?v=1SOmHH1mwe8</a></p> <p>Lesson on factors and multiples - <a href="https://www.youtube.com/watch?v=-PNXlmTvmOQ">https://www.youtube.com/watch?v=-PNXlmTvmOQ</a></p>

	<a href="https://www.youtube.com/watch?v=RJKNH8rvJ24">https://www.youtube.com/watch?v=RJKNH8rvJ24</a> Lesson on primes and composite numbers - <a href="https://www.khanacademy.org/math/pre-algebra/pre-algebra-factors-multiples/pre-algebra-prime-numbers/v/recognizing-prime-numbers">https://www.khanacademy.org/math/pre-algebra/pre-algebra-factors-multiples/pre-algebra-prime-numbers/v/recognizing-prime-numbers</a>
What can students do if they finish early?	<a href="https://www.freckle.com/math/">https://www.freckle.com/math/</a> <a href="https://global-zone08.renaissance-go.com/welcomeportal/709268">https://global-zone08.renaissance-go.com/welcomeportal/709268</a> State Assessment Practice Site - <a href="https://login10.cloud1.tds.airast.org/student/V388/Pages/LoginShell.aspx?c=SouthDakota_P_T">https://login10.cloud1.tds.airast.org/student/V388/Pages/LoginShell.aspx?c=SouthDakota_P T</a>
Who can we contact if we have questions?	<p><b><u>Brandon Elementary</u></b>  <b>Building Principal:</b>  Mr. Horst- <a href="mailto:merle.horst@k12.sd.us">merle.horst@k12.sd.us</a>  <b>Teachers:</b>  Mr. Giles- <a href="mailto:Scott.Giles@k12.sd.us">Scott.Giles@k12.sd.us</a>  Mr. Krivarchka- <a href="mailto:Joe.Krivarchka@k12.sd.us">Joe.Krivarchka@k12.sd.us</a>  Ms. Lane- <a href="mailto:Katee.Lane@k12.sd.us">Katee.Lane@k12.sd.us</a>  Mr. Rogers- <a href="mailto:Marshall.Rogers@k12.sd.us">Marshall.Rogers@k12.sd.us</a>  Mr. Schultz- <a href="mailto:Benjamin.Schultz@k12.sd.us">Benjamin.Schultz@k12.sd.us</a></p> <p><b><u>Fred Assam Elementary</u></b>  <b>Building Principal:</b>  Ms. Foster- <a href="mailto:susan.foster@k12.sd.us">susan.foster@k12.sd.us</a>  <b>Teachers:</b>  Ms. Harte- <a href="mailto:Sarah.Harte@k12.sd.us">Sarah.Harte@k12.sd.us</a>  Ms. Scholten- <a href="mailto:Tara.Scholten@k12.sd.us">Tara.Scholten@k12.sd.us</a>  Mr. Steemken- <a href="mailto:Evan.Steemken@k12.sd.us">Evan.Steemken@k12.sd.us</a>  Ms. Sunne- <a href="mailto:Noel.Sunne@k12.sd.us">Noel.Sunne@k12.sd.us</a></p> <p><b><u>Robert Bennis Elementary</u></b>  <b>Building Principal:</b>  Ms. Hofkamp- <a href="mailto:Kristin.Hofkamp@k12.sd.us">Kristin.Hofkamp@k12.sd.us</a>  <b>Teachers:</b>  Mr. Linneweber- <a href="mailto:Cody.Linneweber@k12.sd.us">Cody.Linneweber@k12.sd.us</a>  Ms. Pudwill- <a href="mailto:Andrea.Pudwill@k12.sd.us">Andrea.Pudwill@k12.sd.us</a>  Ms. Storm- <a href="mailto:Jena.Storm@k12.sd.us">Jena.Storm@k12.sd.us</a>  Mr. Sylliaasen- <a href="mailto:Tim.Sylliaasen@k12.sd.us">Tim.Sylliaasen@k12.sd.us</a></p> <p><b><u>Valley Springs Elementary</u></b>  <b>Building Principal:</b>  Ms. Palmer- <a href="mailto:tanya.palmer@k12.sd.us">tanya.palmer@k12.sd.us</a>  <b>Teacher:</b>  Ms. Abens- <a href="mailto:lindsey.abens@k12.sd.us">lindsey.abens@k12.sd.us</a> long-term sub for <a href="mailto:laura.lueders@k12.sd.us">laura.lueders@k12.sd.us</a></p>
<b>Notes:</b> All these concepts are a review from the beginning of the year.	

***Instructional materials are posted below (if applicable)***

# Standardized Test Practice

Read each question. Fill in the correct answer.

1. Rohen buys 3 movie tickets for  $n$  dollars each. Then she buys a snack for \$5. How much money did Rohen spend if  $n = 7$ ?



- (A) \$21                      (C) \$26  
(B) \$22                      (D) \$36

2. On the first night of the school play 210 people attended. On the second night 216 people attended and on the third night 222 people attended. Based on the pattern, how many people will attend on the fourth night?
- (F) 204 people              (H) 228 people  
(G) 225 people              (I) 234 people

3. Barron walks 5 dogs on odd number dates and 7 dogs on even number dates. How many dogs will Barron have walked in February by February 5?

FEBRUARY						
S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28				

- (A) 24 dogs                      (C) 31 dogs  
(B) 29 dogs                      (D) 36 dogs

4. The table below shows the number of cars Harper saw each day on his street. If the pattern continues, how many cars did Harper see on Friday?

Day	Number of Cars
Monday	7
Tuesday	12
Wednesday	17
Thursday	
Friday	?

- (F) 19 cars  
(G) 20 cars  
(H) 22 cars  
(I) 27 cars

5. The table shows the number of stickers on each sheet. How many stickers are on 5 sheets?

sheets	Number of stickers
1	8
2	16
3	24
4	
5	?

- (A) 8 stickers                      (C) 40 stickers  
(B) 32 stickers                      (D) 48 stickers

GO ON ►

# Standardized Test Practice *(continued)*

6. Stan's grandmother gives him \$3 a week for helping her clean. Stan also earns \$11 for each lawn he mows. Use the function table to find how much Stan would earn if he mows 4 lawns in one week.

$\$3 + (\$11 \times a) = b$	
Output (a)	Output (b)
1	\$14
2	\$25
3	\$36
4	?

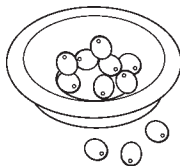
- (F) \$47                      (H) \$41  
 (G) \$44                      (I) \$18

7. Find the unknown.

$$(12 \div 2) + (\blacksquare + 5) = 18$$

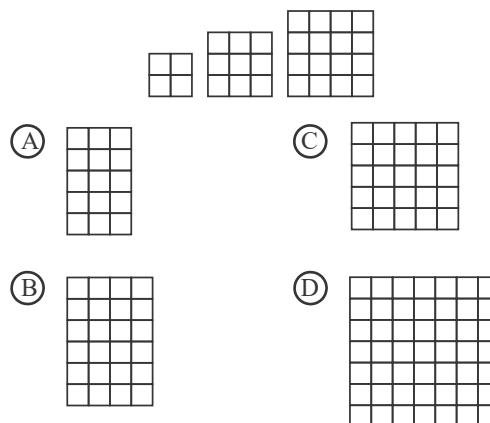
- (A) 8                      (C) 6  
 (B) 7                      (D) 5

8. Porter puts 9 blueberries into each of 7 bowls. There are 8 blueberries left over. How many blueberries are there in all?

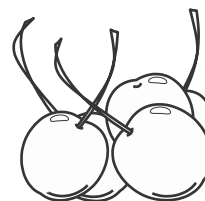


- (F) 24 blueberries      (H) 63 blueberries  
 (G) 55 blueberries      (I) 71 blueberries

9. Calvin is making a pattern with square blocks. Which shape extends Calvin's pattern?



10. A bag of cherries contains 5 cherries. A bag of apples contains 4 apples. How many pieces of fruit are in 7 bags of cherries and 5 bags of apples?



- (F) 9 fruits  
 (G) 53 fruits  
 (H) 55 fruits  
 (I) 65 fruits



# Ch. 8

Find the factor pairs of each number.

1. 48

1. \_\_\_\_\_

2. 56

2. \_\_\_\_\_

Tell whether each number is *prime*, *composite*, or *neither*.

3. 25

3. \_\_\_\_\_

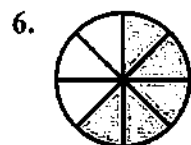
4. 1

4. \_\_\_\_\_

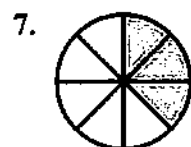
5. 31

5. \_\_\_\_\_

Write the fraction for the part that is shaded. Then find an equivalent fraction.



6. \_\_\_\_\_



7. \_\_\_\_\_

Write each fraction in simplest form.

8.  $\frac{5}{10}$

9.  $\frac{6}{8}$

10.  $\frac{10}{12}$

10. \_\_\_\_\_

Compare. Use  $>$ ,  $<$ , or  $=$ .

11.  $\frac{3}{4} \bigcirc \frac{2}{3}$

12.  $\frac{4}{5} \bigcirc \frac{4}{7}$

11. \_\_\_\_\_

12. \_\_\_\_\_

Write a mixed number for each model.



13. \_\_\_\_\_

14. \_\_\_\_\_

15. Jenna has 2 whole watermelons and one-third of another watermelon. Write a mixed number and improper fraction to represent the amount of watermelons she has.

15. \_\_\_\_\_

Name \_\_\_\_\_

# MY Homework

## Lesson 4

### Equivalent Fractions

## Homework Helper



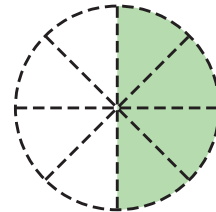
Need help? [connectED.mcgraw-hill.com](http://connectED.mcgraw-hill.com)

Write the fraction for the part that is shaded. Then find two equivalent fractions.

1

Find the fraction that represents the shaded part.

$$\frac{4}{8} \leftarrow \begin{array}{l} \text{number of shaded parts} \\ \text{total number of parts} \end{array}$$



2

Find equivalent fractions.

Multiply the numerator and denominator by the same number, for example, 2.

$$\frac{4 \times 2}{8 \times 2} = \frac{8}{16}$$

Multiply the numerator and denominator by another number, for example, 3.

$$\frac{4 \times 3}{8 \times 3} = \frac{12}{24}$$

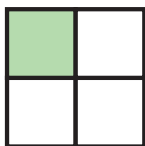
So, the fraction represented by the circle is  $\frac{4}{8}$ .

Two equivalent fractions are  $\frac{8}{16}$  and  $\frac{12}{24}$ .

## Practice

Write the fraction for the part that is shaded. Then find an equivalent fraction.

1.



\_\_\_\_\_

\_\_\_\_\_

2.

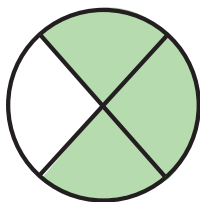


\_\_\_\_\_

\_\_\_\_\_

Write the fraction for the part that is shaded. Then find an equivalent fraction.

3.



\_\_\_\_\_

\_\_\_\_\_

4.



\_\_\_\_\_

\_\_\_\_\_

Find an equivalent fraction for each fraction.

5.  $\frac{20}{100}$  \_\_\_\_\_

6.  $\frac{2}{8}$  \_\_\_\_\_

7.  $\frac{90}{100}$  \_\_\_\_\_

**Algebra** Find each unknown.

8.  $\frac{6}{12} = \frac{x}{2}$

$x =$  \_\_\_\_\_

9.  $\frac{3}{10} = \frac{x}{100}$

$x =$  \_\_\_\_\_

10.  $\frac{5}{8} = \frac{10}{x}$

$x =$  \_\_\_\_\_

## Brain Builders

### 11. **Mathematical PRACTICE**

**Use Number Sense** Janie has 12 pieces of fruit. Eight of the pieces of fruit are bananas. Write three fractions that describe the fraction of fruit that is bananas.

\_\_\_\_\_

12. A box contains 4 red pencils and 6 black pencils. What fraction of the pencils are red? What fraction of pencils are black? Draw a model that shows the fraction of each color of pencil.

\_\_\_\_\_

13. **Test Practice** Laura delivers newspapers. She spent  $\frac{4}{12}$  of her savings on a new CD. Which equivalent fraction shows the amount Laura spent?

(A)  $\frac{1}{9}$

(C)  $\frac{2}{8}$

(B)  $\frac{1}{3}$

(D)  $\frac{2}{3}$



## Lesson 5 Simplest Form

### *Simplest Form*

You can use division to write in simplest form.

**Step 1** Find the common factors.

Factors of 3: 3, 1

Factors of 12: 1, 2, 3, 4, 6, 12

The common factor is 3.

**Step 2** Divide by the greatest common factor.

The simplest form of  $\frac{8}{12}$  is  $\frac{2}{3}$ .

---

Write each fraction in simplest form. If it is already in simplest form, write *simplest form*.

1. \_\_\_\_\_  $\frac{6}{12}$

2. \_\_\_\_\_  $\frac{3}{9}$

3. \_\_\_\_\_  $\frac{5}{15}$

4. \_\_\_\_\_  $\frac{6}{18}$

5. \_\_\_\_\_  $\frac{3}{6}$

6. \_\_\_\_\_  $\frac{4}{12}$

7. Marta ate 2 of 4 muffins. What fraction of the muffins did Marta eat? \_\_\_\_\_

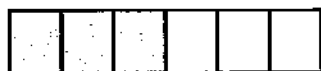
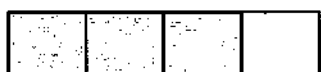
8. Stan made 4 goals out of 6 attempts in soccer today. What fraction of attempts did Stan make? \_\_\_\_\_

## Compare and order fractions

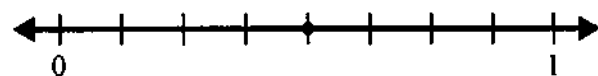
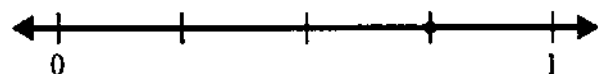
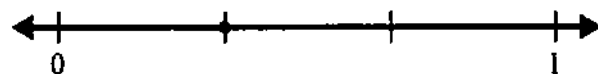
### Compare and Order Fractions

You can use models, number lines, and equivalent fractions to compare and order fractions.

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

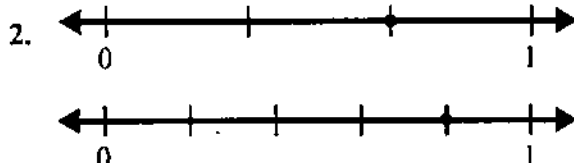


Compare  $\frac{2}{3}$  and  $\frac{1}{2}$ .



The models show that  $\frac{2}{3} > \frac{1}{2}$ . The number line shows that  $\frac{2}{3} > \frac{1}{2}$ .

Compare. Write  $<$ ,  $>$ , or  $=$ .



Order from *least to greatest*.  $\frac{2}{3}, \frac{2}{4}, \frac{4}{5}$

$\frac{2}{3}, \frac{3}{4}, \frac{2}{5}$

3.  $\frac{2}{3}, \frac{2}{4}, \frac{4}{5}$

4.  $\frac{2}{3}, \frac{3}{4}, \frac{2}{5}$

5.  $\frac{2}{3}, \frac{2}{4}, \frac{4}{5}$

6.  $\frac{2}{3}, \frac{3}{4}, \frac{2}{5}$