

7

Learning Activity Sheet for Mathematics

Quarter 1

Week

8

Learning Activity Sheet Mathematics Grade 7

Quarter 1: Week 8

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LEARNING ACTIVITY SHEET

Learning Area:	Mathematics	Quarter:	First
Week:	8	Day:	1
Lesson Title/ Topic:	Addition of Similar Fractions		
Name:		Grade & Section:	7

Activity 1: Exploring the Rules for Addition of Similar Fractions

Objective(s): At the end of the lesson, the students are expected to add similar fractions, give examples, and state the rule on how to find the sum of two or more similar fractions.

Materials Needed: Example-Conclusion Map, slide deck

Duration: 10 minutes

Instructions: Observe the two given examples of addition of fractions. Use your observations to perform the indicated tasks.

1) $\frac{2}{5} + \frac{1}{5} =$

$\frac{3}{7} + \frac{2}{7} = \frac{3+2}{7} = \frac{5}{7}$

$2\frac{5}{12} + 1\frac{7}{12} = (2+1) + \frac{5+7}{12}$
 $= 3 + \frac{12}{12} = 3 + 1 = 4$

2) $\frac{5}{18} + \frac{11}{18} =$

4) $\frac{4}{13} + \frac{6}{13} + \frac{2}{13} =$

3) $3\frac{9}{25} + 4\frac{8}{25} =$

5) $\frac{10}{21} + 5\frac{4}{21} + 2\frac{8}{21} =$

6)

7)

8)

9)

State the rule!

To add two or more similar fractions, _____

Give your own examples!

LEARNING ACTIVITY SHEET

Learning Area:	Mathematics	Quarter:	First
Week:	8	Day:	1
Lesson Title/ Topic:	Subtraction of Similar Fractions		
Name:		Grade & Section:	7

Activity 2: Exploring the Rules for Subtraction of Similar Fractions

Objective(s): At the end of the lesson, the students are expected to subtract similar fractions, give examples, and state the rule on how to find the difference of similar fractions.

Materials Needed: Example-Conclusion Map, slide deck

Duration: 10 minutes

Instructions: Observe the two given examples of subtraction of fractions. Use your observations to perform the indicated tasks.

1) $1\frac{2}{5} - \frac{1}{5} =$

2) $3\frac{11}{16} - 1\frac{8}{16} =$

3) $5\frac{8}{21} - 4\frac{5}{21} =$

4) $6\frac{15}{22} - 3\frac{21}{22} =$

5) $9\frac{21}{35} - 4\frac{34}{35} =$

6)

7)

8)

9)

10)

State the rule!

To subtract two similar fractions, _____

Give your own examples!

LEARNING ACTIVITY SHEET

Learning Area:	Mathematics 7	Quarter:	First
Week:	8	Day:	1
Lesson Title/ Topic:	Addition and Subtraction of Similar Fractions		
Name:		Grade & Section:	7

Activity 3: Mastering Addition/Subtraction of Similar Fractions

Objective(s): At the end of the lesson, you are expected to find the sum/difference of similar fractions and solve problems involving addition/subtraction of similar fractions.

Materials Needed:

Duration: 15 minutes

Instructions:

A. Find the sum.

1) $1\frac{3}{4} + 3\frac{1}{4}$

3) $2\frac{7}{12} + 4\frac{9}{12} + 6\frac{11}{12}$

5) $6\frac{17}{32} + 13\frac{5}{32} + 9\frac{7}{32}$

2) $\frac{5}{9} + 2\frac{2}{9}$

4) $13\frac{12}{25} + 21\frac{21}{25} + 18\frac{24}{25}$

B. Find the difference.

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

4) $2\frac{7}{15} - \frac{11}{15}$

5) $17\frac{9}{12} - (3\frac{7}{12} + 6\frac{5}{12})$

2) $3\frac{1}{3} - \frac{2}{3}$

5) $3\frac{5}{7} - (\frac{2}{7} + 1\frac{4}{7})$

C. Solve the following problems:

1) Find the sum: $\frac{1}{12} + \frac{5}{12} + \frac{7}{12} + \frac{11}{12}$

2) Find the sum: $\frac{1}{30} + \frac{7}{30} + \frac{11}{30} + \frac{13}{30} + \frac{17}{30} + \frac{19}{30} + \frac{23}{30} + \frac{29}{30}$

3) An airline passenger checked in $9\frac{1}{4}$ kg of baggage and another $7\frac{1}{4}$ kg of baggage for his travel companion. How many kilograms of luggage did the passenger check in?

4) Natalie is baking 2 different batches of cookies. One batch needs $1\frac{1}{3}$ cups of sugar and the other batch needs $\frac{2}{3}$ cup of sugar. How much sugar is needed to bake both batches of cookies?

5) A recipe needs $2\frac{3}{5}$ cups of water and $1\frac{1}{5}$ cups of pineapple juice. How much more water is needed than pineapple juice for this recipe?

6) A water tank is currently full of water. Over the course of the day, water is used for different purposes as follows: $\frac{1}{12}$ of water is used for watering the garden, $\frac{3}{12}$ of water for cooking, and $\frac{5}{12}$ of water for cleaning the house. How much water is left in the tank by the end of the day?

7) A construction project uses concrete in three parts of a project, each measured as a fraction of a total supply: $\frac{5}{14}$ for the foundation, $\frac{3}{14}$ for walls, and $\frac{4}{14}$ for roof. After these parts of the project are completed, the project manager realizes that an additional $\frac{1}{14}$ was wasted due to spillage. How much of the total concrete supply is left after accounting for all uses and waste?

8) The family drove their car for $3\frac{2}{5}$ hours to the province. To return home they drove for $5\frac{1}{5}$ hours due to heavy traffic. How much longer time did it take to drive home?

LEARNING ACTIVITY SHEET

Learning Area:	Mathematics 7	Quarter:	First
Week:	8	Day:	1
Lesson Title/ Topic:	Addition and Subtraction of Similar Fractions		
Name:		Grade & Section:	7

Activity 4: Extra Practice on Addition/Subtraction of Similar Fractions

Objective(s): At the end of the lesson, the students are expected to find the sum/ difference of similar fractions, and solve problems involving sum/ difference of similar fractions.

Materials Needed: Activity sheet

Duration: 15 minutes

Instructions:

A. Find the sum.

1) $\frac{1}{3} + \frac{1}{3}$

4) $3\frac{5}{7} + 2\frac{3}{7}$

2) $\frac{2}{4} + 1\frac{1}{4}$

5) $6\frac{5}{9} + 3\frac{2}{9} + 1\frac{7}{9}$

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

B. Find the difference.

1) $\frac{5}{7} - \frac{1}{7}$

4) $5\frac{7}{15} - \frac{11}{15}$

2) $3\frac{4}{9} - \frac{2}{9}$

5) $7\frac{7}{16} - 3\frac{9}{16}$

3) $4\frac{7}{12} - 1\frac{5}{12}$

C. Solve the following problems

1) Find the sum of all positive rational numbers that are less than 10 and that have a denominator 30 when written in lowest terms. (1992 AIME Problems/Problem 1)

2) Find the sum: $999\frac{1}{7} + 999\frac{2}{7} + 999\frac{3}{7} + 999\frac{4}{7} + 999\frac{5}{7} + 999\frac{6}{7}$

LEARNING ACTIVITY SHEET

Learning Area:	Mathematics	Quarter:	First
Week:	8	Day:	2
Lesson Title/ Topic:	Addition of Dissimilar Fractions		
Name:		Grade & Section:	7

Activity 1: Exploring the Rules for Addition of Dissimilar Fractions

Objective(s): At the end of the lesson, the students are expected to add dissimilar fractions, give examples, and state the rule on how to find the sum of two or more dissimilar fractions.

Materials Needed: Activity Sheet, slide deck

Duration: 10 minutes

Instructions: Observe the two given examples of addition of fractions. Use your observations to perform the indicated tasks.

Examples		
1) $\frac{7}{12} + \frac{1}{3} =$ LCD(12,3) = 12 $\frac{7}{12} + \frac{1}{3} = \frac{7}{12} + \frac{1(4)}{3(4)}$ $= \frac{7}{12} + \frac{4}{12}$ $= \frac{7+4}{12} = \frac{11}{12}$	2) $\frac{9}{14} + 1\frac{16}{21} =$ LCD(14, 21) = 42 $\frac{9}{14} + 1\frac{16}{21} = \frac{9(3)}{14(3)} + 1\frac{16(2)}{21(2)}$ $= \frac{27}{42} + 1\frac{32}{42}$ $= 1\frac{59}{42} = 2\frac{17}{42}$	3) $2\frac{7}{15} + 3\frac{5}{6} =$ LCD(15, 6) = 30 $2\frac{7}{15} + 3\frac{5}{6} = 2\frac{7(2)}{15(2)} + 3\frac{5(5)}{6(5)}$ $= (2 + 3) + \frac{14}{30} + \frac{25}{30}$ $= 5\frac{14+25}{30} = 5\frac{39}{30} = 5\frac{(30+9)}{30}$ $= 5 + \frac{30}{30} + \frac{9}{30}$ $= 6\frac{9}{30} = 6\frac{3}{10}$
A: Find the sum.		
1) $\frac{5}{6} + 1\frac{11}{18}$	2) $\frac{11}{27} + 2\frac{7}{9}$	3) $5\frac{13}{24} + 4\frac{17}{12}$
4) $\frac{11}{12} + \frac{2}{3} + \frac{3}{4}$	5) $3\frac{19}{30} + 1\frac{5}{6} + \frac{1}{3}$	6) $8\frac{13}{16} + 6\frac{9}{20} + \frac{1}{2}$
B: Give your own examples and solve.		
C: Complete the statement in finding the sum of two or more dissimilar fractions. To find the sum of dissimilar fractions, ...		

LEARNING ACTIVITY SHEET

Learning Area:	Mathematics	Quarter:	First
Week:	8	Day:	2
Lesson Title/ Topic:	Subtraction of Dissimilar Fractions		
Name:		Grade & Section:	7

Activity 2: Exploring the Rules for Subtraction of Dissimilar Fractions

Objective(s): At the end of the lesson, the students are expected to subtract dissimilar fractions, give examples, and state the rule on how to find the difference of dissimilar fractions.

Materials Needed: Activity Sheet, slide deck

Duration: 10 minutes

Instructions: Observe the two given examples of subtraction of fractions. Use your observations to perform the indicated tasks.

Examples		
1) $\frac{11}{16} - \frac{13}{24} =$ $\text{lcd}(24,16) = 48$ $\frac{11}{16} - \frac{13}{24} = \frac{11(3)}{16(3)} - \frac{13(2)}{24(2)}$ $= \frac{33}{48} - \frac{26}{48}$ $= \frac{33-26}{48}$ $= \frac{7}{48}$	2) $2\frac{15}{32} - \frac{29}{48} =$ $\text{lcd}(32, 48) = 96$ $2\frac{15}{32} - \frac{29}{48} = 2\frac{15(3)}{32(3)} - \frac{29(2)}{48(2)}$ $= 2\frac{45}{96} - \frac{58}{96}$ $= 1\frac{96+45}{96} - \frac{58}{96}$ $= 1\frac{141}{96} - \frac{58}{96}$ $= 1\frac{83}{96}$	3) $\frac{5}{6} - \left(\frac{5}{18} + \frac{5}{12}\right) =$ $\text{lcd}(6, 18,12) = 36$ $\frac{5}{6} - \left(\frac{5}{18} + \frac{5}{12}\right) = \frac{5(6)}{6(6)} - \left(\frac{5(2)}{18(2)} + \frac{5(3)}{12(3)}\right)$ $= \frac{30}{36} - \left(\frac{10}{36} + \frac{15}{36}\right)$ $= \frac{30-(10+15)}{36}$ $= \frac{30-25}{36}$ $= \frac{5}{36}$
A: Find the difference.		
1) $\frac{11}{14} - \frac{5}{28}$	2) $3\frac{4}{27} - \frac{7}{9}$	3) $\frac{2}{3} - \left(\frac{1}{6} + \frac{5}{12}\right)$
4) $2\frac{27}{32} - 1\frac{5}{8}$	5) $1\frac{3}{4} - \frac{25}{22}$	6) $\left(3\frac{6}{7} + \frac{1}{14}\right) - 2\frac{4}{21}$
B: Give your own examples and solve.		
C: Complete the statement in finding the difference of dissimilar fractions. To find the difference of dissimilar fractions, ...		

LEARNING ACTIVITY SHEET

Learning Area:	Mathematics 7	Quarter:	First
Week:	8	Day:	2
Lesson Title/ Topic:	Addition and Subtraction of Dissimilar Fractions		
Name:		Grade & Section:	7

Activity 3: Mastering Addition/Subtraction of Dissimilar Fractions

Objective(s): At the end of the lesson, the students are expected to find the sum/ difference of given fractions and solve problems involving addition of dissimilar fractions.

Materials Needed:

Duration: 15 minutes

Instructions:

A. Find the sum.

1) $\frac{5}{6} + \frac{1}{12}$

4) $\frac{5}{7} + 1\frac{2}{3} + \frac{13}{14}$

2) $3\frac{4}{9} + 4\frac{1}{3}$

5) $7\frac{7}{12} + 3\frac{5}{8} + 6\frac{21}{24}$

3) $\frac{8}{15} + \frac{3}{5} + \frac{17}{20}$

B. Find the difference.

1) $\frac{5}{8} - \frac{3}{12}$

4) $\left(\frac{21}{27} + \frac{5}{18}\right) - \frac{1}{3}$

2) $10\frac{7}{12} - 3\frac{5}{18}$

5) $6\frac{17}{24} - \left(1\frac{5}{8} + \frac{2}{3}\right)$

3) $3\frac{7}{32} - 1\frac{9}{16}$

C. Solve the following problems:

1) Find the sum: $\left(2 + \frac{3}{4}\right) - \left(\frac{1}{2} + \frac{4}{3}\right)$

2) Aling Andeng is working at her juice stand. She sold $2\frac{1}{3}$ containers of lemonade in the morning and have $\frac{1}{2}$ of a container left to sell. How many containers of lemonade did Aling Andeng start with?

3) Gary is having an experiment. He is observing the heights of plants. His data is shown below. What is the difference between the heights of: a) Kalamansi and Guava plants; b) Guava and Mango?

Plants	Height (meters)
Kalamansi	$1\frac{3}{4}$
Guava	$2\frac{1}{3}$
Mango	$3\frac{5}{8}$

4) Find the value of $3 - \frac{3}{4} + \frac{1}{3} - 1\frac{1}{3}$.

5) Find the value of $\frac{\frac{1}{3} - \frac{1}{4}}{\frac{1}{5} + \frac{1}{6}} - \frac{1}{11}$.

6) Jen is $1\frac{1}{3}$ of a foot taller than Gab. Gab is $4\frac{5}{6}$ feet tall. How tall is Jen?

- 7) The sum of two rational numbers is $1\frac{17}{21}$. If one of the numbers is $\frac{5}{7}$, find the other number.
- 8) Carlo bought 18 kg of Rice and he used $1\frac{1}{4}$ kg on the first day, $3\frac{1}{2}$ kg on the second day, and $2\frac{5}{8}$ kg on the third day. How many kilograms of rice left?
- 9) From a wire 20 m long, two pieces of lengths $1\frac{11}{12}$ m and $1\frac{7}{8}$ m are cut off. What is the length of the remaining wire?
- 10) Kath and her sister went together to get haircuts. She got $\frac{3}{4}$ of an inch cut off and her sister got $\frac{7}{12}$ of an inch cut off. Compared to her sister, how much more hair did Kath get taken off?

LEARNING ACTIVITY SHEET

Learning Area:	Mathematics 7	Quarter:	First
Week:	8	Day:	2
Lesson Title/ Topic:	Addition and Subtraction of Dissimilar Fractions		
Name:		Grade & Section:	7

Activity 4: Extra Practice on Addition/Subtraction of Dissimilar Fractions

Objective(s): At the end of the lesson, the students are expected to find the sum/ difference of dissimilar fractions, and solve problems involving sum/ difference of dissimilar fractions.

Materials Needed: Activity sheet

Duration: 15 minutes

Instructions:

A. Find the sum.

1) $\frac{3}{5} + \frac{2}{3}$

4) $1\frac{8}{9} + 5\frac{1}{6}$

2) $\frac{1}{2} + 1\frac{5}{7}$

5) $5\frac{2}{3} + 1\frac{5}{7} + 2\frac{3}{5}$

3) $3\frac{2}{15} + \frac{1}{2}$

B. Find the difference.

1) $\frac{7}{11} - \frac{1}{2}$

4) $12\frac{7}{6} - 6\frac{11}{15}$

2) $2\frac{5}{12} - \frac{7}{8}$

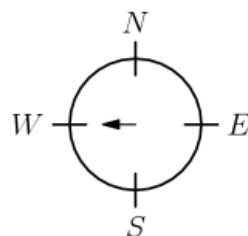
5) $8\frac{7}{18} - 3\frac{13}{12}$

3) $6\frac{5}{6} - 3\frac{5}{18}$

C. Solve the following problems

1) Find the sum: $\frac{1}{2} + \frac{2}{3} + \frac{3}{4} + \frac{4}{5} + \frac{5}{6} + \frac{6}{7}$

- 2) Initially, a spinner points west. Chenille moves it clockwise $2\frac{1}{4}$ revolutions and then counterclockwise $3\frac{3}{4}$ revolutions. In what direction does the spinner point after the two moves?
2006 AMC 8 Problems/Problem 4



LEARNING ACTIVITY SHEET

Learning Area:	Mathematics	Quarter:	First
Week:	8	Day:	3
Lesson Title/ Topic:	Multiplication of Fractions/Mixed Numbers		
Name:		Grade & Section:	7

Activity 1: Multiplication of Fractions/Mixed Numbers

Objective(s): At the end of the lesson, the students are expected to multiply fractions/mixed numbers.

Materials Needed: Activity sheet, slide deck

Duration: 10 minutes

Instructions: Observe the three given examples of multiplication of fractions. Use your observations to perform the indicated tasks.

Examples		
$3 \cdot \left(\frac{7}{18}\right) = \frac{3}{1} \cdot \left(\frac{7}{2 \cdot 3 \cdot 3}\right)$ $= \frac{\cancel{3}^1 \cdot 7}{1 \cdot 2 \cdot \cancel{3}_1 \cdot 3}$ $= \frac{7}{2 \cdot 3}$ $= \frac{7}{6} \text{ or } 1\frac{1}{6}$	$\frac{13}{51} \cdot \left(\frac{17}{26}\right) = \frac{13}{3 \cdot 17} \cdot \left(\frac{17}{2 \cdot 13}\right)$ $= \frac{\cancel{13}^1 \cdot \cancel{17}_1}{2 \cdot 3 \cdot \cancel{17}_1 \cdot \cancel{13}_1}$ $= \frac{1}{2 \cdot 3}$ $= \frac{1}{6}$	$1\frac{11}{91} \cdot \left(\frac{26}{51}\right) = \frac{102}{7 \cdot 13} \cdot \left(\frac{2 \cdot 13}{3 \cdot 17}\right)$ $= \frac{\cancel{102}^1 \cdot \cancel{13}_1 \cdot 2}{7 \cdot \cancel{13}_1 \cdot 3 \cdot 17}$ $= \frac{4}{7}$
A. Find the product.		
1) $12 \cdot \left(\frac{1}{42}\right) =$	3) $\frac{6}{65} \cdot \left(\frac{26}{75}\right) =$	5) $2\frac{3}{16} \cdot \left(1\frac{5}{7}\right) =$
2) $\left(\frac{7}{24}\right) \cdot 32 =$	4) $\frac{39}{64} \cdot \left(\frac{24}{91}\right) =$	6) $3\frac{1}{5} \cdot \left(1\frac{1}{64}\right) =$
B: Give your own examples and solve.		
C: Complete the statement in finding the product of a whole number and a fraction. To find the product of fractions, ...		

LEARNING ACTIVITY SHEET

Learning Area:	Mathematics	Quarter:	First
Week:	8	Day:	3
Lesson Title/ Topic:	Division of Fractions/Mixed Numbers		
Name:		Grade & Section:	7

Activity 2: Division of Fractions/Mixed Numbers

Objective(s): At the end of the lesson, the students are expected to divide fraction/mixed number by fraction/mixed number.

Materials Needed: Activity sheet, slide deck

Duration: 10 minutes

Instructions: Observe the three given examples of division of fractions. Use your observations to perform the indicated tasks.

Examples		
$1) \frac{9}{14} \div 3 = \frac{9}{14} \cdot \left(\frac{1}{3}\right)$ $= \frac{3 \cdot \cancel{3}}{2 \cdot 7 \cdot \cancel{3}} = 1$ $= \frac{3}{14}$	$1) \frac{3}{8} \div \left(\frac{15}{16}\right) = \frac{3}{8} \cdot \left(\frac{16}{15}\right)$ $= \frac{3}{8} \cdot \left(\frac{2 \cdot 8}{3 \cdot 5}\right)$ $= \frac{\cancel{3} \cdot 8}{8 \cdot \cancel{3}} \cdot \left(\frac{2}{5}\right)$ $= 1 \cdot \left(\frac{2}{5}\right)$ $= \frac{2}{5}$	$1) 1\frac{3}{8} \div \left(\frac{11}{24}\right) = \frac{11}{8} \cdot \left(\frac{24}{11}\right)$ $= \frac{11}{8} \cdot \left(\frac{8 \cdot 3}{11}\right)$ $= \frac{11 \cdot 8}{8 \cdot 11} \cdot \left(\frac{3}{1}\right)$ $= 1 \cdot \left(\frac{3}{1}\right)$ $= 3$
A. Find the quotient.		
1) $\left(\frac{21}{25}\right) \div 42 =$	1) $\frac{18}{65} \div \left(\frac{36}{91}\right) =$	1) $2\frac{1}{32} \div \left(4\frac{1}{16}\right) =$
4) $15 \div \left(\frac{6}{7}\right) =$	4) $\frac{13}{35} \div \left(\frac{39}{70}\right) =$	4) $3\frac{1}{15} \div \left(2\frac{2}{45}\right) =$
B: Give your own examples and solve.		
C: Complete the statement in finding the quotient of a whole number and a fraction. To divide fraction/mixed number by fraction/mixed number, ...		

LEARNING ACTIVITY SHEET

Learning Area:	Mathematics 7	Quarter:	First
Week:	8	Day:	3
Lesson Title/ Topic:	Multiplication/Division of Fractions		
Name:		Grade & Section:	7

Activity 3: Mastering Multiplication/Division of Fractions

Objective(s): At the end of the lesson, the students are expected to find the product/ quotient of fractions, and solve problems involving multiplication/ division of fractions.

Materials Needed: Activity sheets

Duration: 15 minutes

Instructions:

A. Find the product.

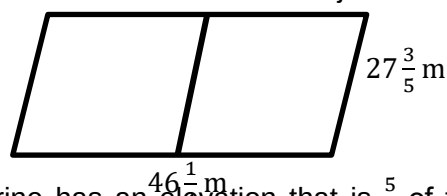
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|--------------------------------------|--|---|---|--|
| 1) $\frac{2}{15} \cdot \frac{5}{6}$ | 3) $\frac{12}{35} \cdot \frac{7}{48}$ | 5) $12\frac{1}{2} \cdot \left(6\frac{4}{5}\right)$ | 8) $1\frac{7}{15} \cdot \left(2\frac{1}{22}\right)$ | 9) $2\frac{4}{13} \cdot \left(2\frac{1}{6}\right)$ |
| 2) $\frac{7}{8} \cdot \frac{16}{21}$ | 4) $5\frac{5}{12} \cdot \left(\frac{4}{13}\right)$ | 6) $5\frac{15}{32} \cdot \left(7\frac{17}{25}\right)$ | 7) $1\frac{5}{8} \cdot \left(3\frac{7}{39}\right)$ | 10) $5\frac{5}{18} \cdot \left(3\frac{3}{19}\right)$ |

B. Find the quotient.

- | | | | | |
|---------------------------------------|---|---|---|---|
| 1) $\frac{2}{15} \div \frac{8}{45}$ | 3) $\frac{16}{21} \div \frac{20}{35}$ | 5) $12\frac{1}{2} \div \left(6\frac{7}{8}\right)$ | 7) $3\frac{5}{8} \div \left(1\frac{5}{24}\right)$ | 9) $3\frac{1}{13} \div \left(2\frac{2}{39}\right)$ |
| 2) $\frac{13}{16} \div \frac{39}{40}$ | 4) $5\frac{5}{12} \div \left(\frac{5}{36}\right)$ | 6) $2\frac{5}{32} \div \left(2\frac{12}{40}\right)$ | 8) $3\frac{8}{15} \div \left(2\frac{13}{20}\right)$ | 10) $5\frac{5}{18} \div \left(5\frac{5}{32}\right)$ |

C. Solve the following problems:

- The hour hand of a clock moves 30° every hour. How many degrees does it move in $3\frac{1}{5}$ hours?
- A 15.5-gallon gasoline tank is $\frac{4}{5}$ full. How many gallons will it take to fill the tank?
- Write two fractions whose product is $2\frac{4}{7}$.
- Fencing costs P 920.50 per meter. How much does it cost to enclose two adjacent rectangular pastures as shown? Justify your answer.



- A ship has an elevation of $36\frac{1}{2}$ meters. A submarine has an elevation that is $\frac{5}{7}$ of the ship's elevation. What is the submarine elevation?
- Give two fractions whose product is between $\frac{2}{5}$ and $\frac{5}{6}$, and whose sum is negative.
- When Pearl and Pete were each 6 years old, Pearl was $2\frac{1}{3}$ inches taller than Pete. Then Pearl grew at an average rate of $2\frac{2}{5}$ inches per year until she was 16 years old. Pearl was 65 inches tall when she was 16 years old. How tall was Pete when he was 6 years old?
- A young man by the name of Zeno is riding his horse to his friend's house which is four kilometers away. He travels half the distance in one hour. But his horse gets tired, and only travels half the remaining distance the second hour, and, again, only half the remaining distance in the third hour. How many kilometers did Zeno travel in those three hours?
- You are stacking wooden blocks with the $3\frac{1}{6}$ cm by $3\frac{1}{6}$ cm by $3\frac{1}{6}$ cm dimensions. How many blocks do you need to stack vertically to build a block tower that is $25\frac{1}{3}$ centimeters tall?
- What fraction when multiplied by $2\frac{4}{5}$ gives $1\frac{13}{15}$?

LEARNING ACTIVITY SHEET

Learning Area:	Mathematics 7	Quarter:	First
Week:	8	Day:	3
Lesson Title/ Topic:	Multiplication/Division of Fractions		
Name:		Grade & Section:	7

Activity 4: Extra Practice on Multiplication of Fractions/Mixed Numbers.

Objective(s): At the end of the lesson, the students are expected to find the sum/ difference of dissimilar fractions, and solve problems involving sum/ difference of dissimilar fractions.

Materials Needed: Activity sheet

Duration: 15 minutes

Instructions:

A. Find the product.

- 1) $6 \cdot \left(\frac{5}{24}\right)$
- 2) $15 \cdot \left(\frac{29}{90}\right)$
- 3) $21 \cdot \left(\frac{3}{14}\right)$
- 4) $\frac{10}{21} \cdot (18)$
- 5) $\frac{9}{35} \cdot \left(\frac{7}{12}\right)$
- 6) $\frac{14}{51} \cdot \left(\frac{17}{35}\right)$
- 7) $\frac{16}{63} \cdot \left(\frac{21}{62}\right)$
- 8) $\frac{4}{21} \cdot \left(1\frac{7}{26}\right)$
- 9) $5\frac{3}{18} \cdot \left(2\frac{10}{31}\right)$
- 10) $2\frac{5}{8} \cdot \left(1\frac{1}{6}\right)$

B. Find the quotient.

- 1) $24 \div \left(\frac{6}{7}\right)$
- 2) $15 \div \left(\frac{6}{7}\right)$
- 3) $\frac{12}{17} \div (6)$
- 4) $\frac{36}{49} \div (72)$
- 5) $\frac{9}{22} \div \left(\frac{27}{77}\right)$
- 6) $\frac{21}{85} \div \left(\frac{63}{68}\right)$
- 7) $\frac{12}{51} \div \left(\frac{24}{85}\right)$
- 8) $\frac{13}{30} \div \left(1\frac{1}{12}\right)$
- 9) $5\frac{5}{14} \div \left(2\frac{1}{7}\right)$
- 10) $3\frac{1}{16} \div \left(1\frac{3}{32}\right)$

C. Solve the following problems.

- 1) Find the product: $\left(-\frac{2}{3}\right)^3$
- 2) In music, a quaver is one-eighth of a semibreve (whole note). What fraction of a semibreve is a hemidemisemiquaver? (Hint: hemi-, demi-, and semi- are prefixes each of which represents a multiplication by one-half). ([Play Alcumus - Art of Problem Solving](#))
- 3) The section of the 164 inches sidewalk is made using wooden boards that are each $9\frac{3}{4}$ inches wide. The spacing between each board is equal. What is the width of the spacing between each board?
- 4) A young man by the name of Zeno is riding his horse to his friend's house which is four kilometers away. He travels half the distance in one hour. But his horse gets tired, and only travels half the remaining distance the second hour, and, again, only half the remaining distance in the third hour. How many kilometers did Zeno travel in those three hours?
- 5) What is the product of $\frac{3}{2} \times \frac{4}{3} \times \frac{5}{4} \dots \times \frac{2006}{2005}$?
- 6) What is the product of $\frac{1}{3} \times \frac{2}{4} \times \frac{3}{5} \dots \times \frac{18}{20} \times \frac{19}{21} \times \frac{20}{22}$? (2022 AMC 8 Problems/Problem 8-
https://artofproblemsolving.com/wiki/index.php/2022_AMC_8_Problems/Problem_8)

LEARNING ACTIVITY SHEET

Learning Area:	Mathematics	Quarter:	First
Week:	8	Day:	4
Lesson Title/ Topic:	Operations on Decimals		
Name:		Grade & Section:	7

Activity 1: Addition/Subtraction of Decimals

Objective(s): At the end of the lesson, the students are expected to add/ subtract decimals.

Materials Needed: Activity sheet, slide deck

Duration: 10 minutes

Instructions: Perform the indicated operation.

A. Complete the solution of the following to find the sum/ difference.		
Without regrouping: 1) Find the sum: $658.251 + 231.04$ $\begin{array}{r} 658.251 \\ + 231.040 \\ \hline .291 \end{array}$ 2) Find the difference: $283.584 - 160.07$ $\begin{array}{r} 283.584 \\ - 160.370 \\ \hline .214 \end{array}$	With regrouping: 1) Find the sum: $805.39 + 697.63$ $\begin{array}{r} 805.39 \\ + 697.63 \\ \hline . \end{array}$ 2) Find the difference: $169.32 - 89.764$ $\begin{array}{r} 283.584 \\ - 160.370 \\ \hline . \end{array}$	Anne travelled 286.72 km and Aldrin travelled 753.81 km. What is the total distance travelled by Anne and Aldrin? Who travelled the most and by how much? <i>Given:</i> 286.72 km travelled by Anne 753.81 km travelled by Aldrin <i>Solution:</i> $\begin{array}{r} 286.71 \\ + 753.82 \\ \hline . \end{array}$ The total distance travelled by Anne and Aldrin is _____ km. $\begin{array}{r} 753.82 \\ - 286.71 \\ \hline . \end{array}$ _____ travelled most by _____ km.
B: Find the sum/ difference.		
1) $223.035 + 152.23 + 304.5$	3) $735.26 + 801.9$	5) Mrs. Ramirez spent P 263.80 on fruits, P 165.75 on vegetables, and P1,562.69. How much money did she spend in total?
2) $(689.35 + 210.043) - 167.28$	4) $1,891.058 - (530.12 + 25.0123)$	7) Jake has P 5,743.93 in his savings account. How much does he have in his account after he makes a check deposit of P 1,358.65 and a withdrawal of P 2,300?
C: Give your own examples and solve.		
D: Complete the statement in finding the sum/ difference of decimals. To find the sum/difference of decimals, ...		

LEARNING ACTIVITY SHEET

Learning Area:	Mathematics	Quarter:	First
Week:	8	Day:	4
Lesson Title/ Topic:	Operations on Decimals		
Name:		Grade & Section:	7

Activity 2: Multiplication/ Division of Decimals

Objective(s): At the end of the lesson, the students are expected to multiply/ divide decimals.

Materials Needed: Activity sheet, slide deck

Duration: 10 minutes

Instructions: Perform the indicated operation.

Examples	
Find the product: 63.75×3.64 $\begin{array}{r} 63.75 \\ \times 3.64 \\ \hline 25500 \\ 38250 \\ + 19125 \\ \hline 232.0500 \end{array}$ → 2 digits to the right of decimal point → 2 digits to the right of decimal point → 4 digits to the right of decimal point Zeroes at the end of decimal numbers and to the right of the decimal point can be eliminated.	Find the quotient: $512.38 \div 6.8$ $6.8 \overline{) 512.38} \rightarrow 68. \overline{) 5123.8}$ Move the decimal point of the divisor to make it whole number. Then, move the decimal point of the dividend with the same number of movements in the divisor. Place the decimal point of the quotient directly above the decimal point of the dividend. $\begin{array}{r} 75.35 \\ 68 \overline{) 5123.80} \\ \underline{- 476} \\ 363 \\ \underline{- 340} \\ 238 \\ \underline{- 204} \\ 340 \\ \underline{- 340} \\ 0 \end{array}$
A. Find the product/ quotient.	
1) 215×3.2	3) $36.48 \div 1.2$
2) 32.81×5.2	4) $14.475 \div 0.75$
B. Give your own Examples and solve.	
C. Complete the statement in finding the product/ quotient of decimals.	
To find the product/ quotient of decimals...	

LEARNING ACTIVITY SHEET

Learning Area:	Mathematics 7	Quarter:	First
Week:	8	Day:	4
Lesson Title/ Topic:	Operations on Decimals		
Name:		Grade & Section:	7

Activity 3: Mastering Operations on Decimals

Objective(s): At the end of the lesson, the students are expected to perform operations on decimals, and solve problems involving decimals.

Materials Needed: Activity sheets

Duration: 15 minutes

Instructions:

A. Find the sum/ difference.

- | | | |
|-------------------------|-------------------------|------------------------------|
| 1) $365.06 + 134.83$ | 3) $1,918.36 - 807.15$ | 5) $304.56 - 68.79 + 678.72$ |
| 2) $504.36 + 8,954.657$ | 4) $689.089 - 496.7532$ | |

B. Find the product/ quotient.

- | | | |
|-----------------------|-----------------------|--------------------------------|
| 1) 95.21×2.4 | 3) $180.45 \div 80.2$ | 5) $6.82 \times 4.5 \div 3.41$ |
| 2) 25.6×15.1 | 4) $51.12 \div 4.8$ | |

C. Solve the following problems:

- 1) A piece of ballpen worth P 11.25. How much is the cost of 25 pieces of ballpens?
- 2) Dante subtracted the width of their window from the length of their door. He found that he has 115.78 cm door length left. If the window is 134.22 cm wide, what is the length of the door?
- 3) If John were 26.4 cm taller, he would be twice as tall as Jane. If Jane is 75.2 cm tall, how tall is John?
- 4) The quotient of two natural numbers, with the larger number as the dividend, is 1.02. What is the sum of the two numbers?
- 5) How many pieces of 1.5 meters can you cut from 6.3 meters of ribbon?
- 6) There are 5.6 liters of milk in a container and 1.8 liters of water pour into the same container. How much liquid is in the container?
- 7) There are 20.7 cups of flour in a bag. Mother uses 3.6 cups for making cookies, and 4.8 cups of flour for making banana bread. How many cups of flour are left?
- 8) A student has grades in English, Math, and Science as follows, 85.6, 90.8, and 89.75, respectively. What is the average grade of the student in the three subjects?

LEARNING ACTIVITY SHEET

Learning Area:	Mathematics 7	Quarter:	First
Week:	8	Day:	4
Lesson Title/ Topic:	Operations on Decimals		
Name:		Grade & Section:	7

Activity 4: Extra Practice on Operations on Decimals.

Objective(s): At the end of the lesson, the students are expected to perform operations on decimals, and solve problems involving decimals.

Materials Needed: Activity sheet

Duration: 15 minutes

Instructions:

A. Find the sum.

- | | | |
|---------------------|----------------------|-------------------|
| 1) $65.305 + 71.68$ | 3) $90.183 + 687.89$ | 5) $3.08 + 4.685$ |
| 2) $9.181 + 6.75$ | 4) $91.26 + 61.208$ | |

B. Find the difference.

- | | | |
|-------------------|--------------------|-------------------|
| 1) $18.35 - 5.05$ | 3) $35.68 - 9.065$ | 5) $7.08 - 5.348$ |
| 2) $69.39 - 34.2$ | 4) $96.07 - 27.59$ | |

C. Find the product.

- | | | |
|---------------------|----------------------|--------------------|
| 1) 6.1×5 | 3) 5.3×2.4 | 5) 3.2×28 |
| 2) 2.4×0.3 | 4) 0.42×2.1 | |

D. Find the quotient.

- | | | |
|--------------------|----------------------|---------------------|
| 1) $0.75 \div 0.2$ | 3) $10.58 \div 2.3$ | 5) $15.36 \div 4.8$ |
| 2) $3.68 \div 1.6$ | 4) $2.562 \div 0.42$ | |

E. Solve the following problems.

- Write $1 - \frac{1}{10} + \frac{1}{100} - \frac{1}{1,000} + \frac{1}{10,000} - \frac{1}{100,000}$ as a decimal.
- What is the value of $\frac{44}{11} + \frac{110}{44} + \frac{44}{1100}$ in decimal?
- The heights of the members of a choir are 148 cm, 141 cm, 172.5 cm, 168 cm, 151.5 cm, 183.5 cm, and 178.5 cm. What is the average of their heights?