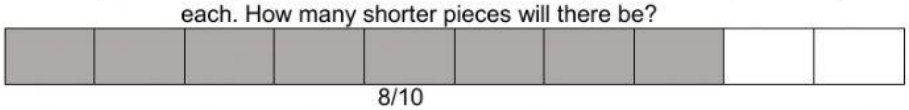
Worksheet Quarter 1
Week 3

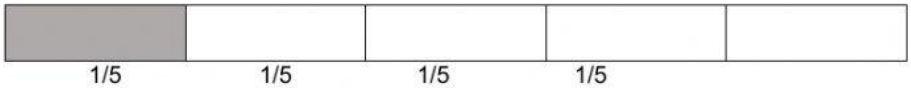
Name: _____ Gr./Sec: _____ Teacher: _____

a. Divides simple fractions and mixed fractions. M6NS-Ic-96.2

Examples: 1. An $\frac{8}{10}$ meter piece of wood is cut equally into shorter pieces of $\frac{1}{5}$ meter each. How many shorter pieces will there be?



8/10



1/5 1/5 1/5 1/5

Based on the blocks, we can say that 1/5 fits into 8/10 four times. The equation $\frac{8}{10} \div \frac{1}{5} = 4$

2. Divide $\frac{3}{7} \div \frac{3}{5} = \frac{3}{7} \times \frac{5}{3}$ Multiply the dividend by the reciprocal of the divisor.

The reciprocal of $\frac{3}{5}$ is $\frac{5}{3}$ rewrite the equation $\frac{3}{7} \times \frac{5}{3}$ Multiply the numerator and the denominator = $\frac{15}{21}$ then get the lowest term of $\frac{15}{21}$ is $\frac{5}{7}$

3. $5 \div \frac{1}{3} = \frac{5}{1} x \frac{3}{1}$ Multiply the dividend by the reciprocal of the divisor

$\frac{5}{1} \times \frac{3}{1} = \frac{15}{1} = 15$

4. $16 \div 2\frac{1}{5} = \frac{16}{1} \div 2\frac{1}{5} =$ change mixed number into improper fraction $2\frac{+1}{x\,5}$ is $\frac{11}{5}$ the reciprocal is $\frac{5}{11}$

$\frac{16}{1} \times \frac{5}{11} = \frac{80}{11}$ simplify the answer $7\frac{3}{11}$

b. Solves routine or non-routine problems involving division without or with any of the other operations of fractions and mixed fractions using appropriate problem solving strategies and tools. M6NS-Ic-97.2

Shane has a piece of rope that is $7\frac{4}{5}$ meters long. If he cuts it into pieces that are each $\frac{3}{5}$ of a unit long, how many pieces does she have?

POLYA'S STEP

- Understand
  What is asked? Pieces of rope that she have.
  What are given? $7\frac{4}{5}$ meters long $\frac{3}{5}$ unit long
- Plan
  What is the operation to be used? division of fraction
  What is the number sentence? $7\frac{4}{5} \div \frac{3}{5} = N$
- Look back (rename mixed number to improper fraction $7\frac{4}{5} = \frac{39}{5}$) ($\frac{3}{5}$ reciprocal is $\frac{5}{3}$)
- Solve $\frac{39}{5} x \frac{5}{3} = \frac{195}{15}$ or 13 pieces . (multiply the numerator and the denominator then divide simplify the answer.)

➢ **Exercises #1** Give the reciprocal of the following divisor.

_____1. $\frac{4}{5} \div \frac{2}{3}$ _____ 2. $\frac{3}{5} \div 10$ _____3. $3\frac{3}{8} \div 1\frac{4}{5}$

_____4. $10\frac{1}{3} \div \frac{3}{10}$ _____5. $\frac{2}{5} \div \frac{3}{4}$

➢ **Exercises # 2** Find the quotient.

1. $\frac{7}{8} \div \frac{1}{8}$ 2. $4\frac{2}{7} \div 5$ 3. $12 \div \frac{2}{7}$

4. $\frac{1}{3} \div \frac{1}{6}$ 5. $20 \div \frac{5}{9}$

➢ **Exercises # 3** Encircle the letter that has the correct answer.

1. What is the quotient if you divide $\frac{9}{10} \div 1\frac{1}{8}$	$a.\frac{36}{45}$	$b.\frac{12}{15}$	$c.\ \frac{4}{5}$
2. How many $\frac{2}{5}$ are there in $1\frac{3}{5}$?	a. 4	b. 3	c. 2
3. Solve for the quotient $\frac{5}{13} \div \frac{2}{3}$	a. $\frac{12}{26}$	b. $\frac{15}{26}$	c.$\frac{17}{26}$
4. Divide $\frac{10}{25} \div 4$	a. $\frac{1}{6}$	b. $\frac{1}{8}$	c. $\frac{1}{10}$
5. A 9-meter long stick was cut into pieces. If each piece was $\frac{3}{4}$ m., how many pieces were there?	a. 12	b. 11	c. 10

➢ **Exercise # 4** Read and solve the problem.

1. Ana has $\frac{8}{12}$ meter of cloth to make into towels. If each towels requires $\frac{1}{24}$ meter, how many towels can she make?

a. What is asked?_____

b. What are given data?_____

c. What is the answer?_____

2. A fruit vendor weighed 5 papayas the total weight was $4\frac{1}{6}$ kg. What was the average weight of each papaya ?

a. What is asked ? _____

b. What is the operation to be used?_____

c. What is the answer?_____