Fractions

Adding and Subtracting Unlike Terms

For

High School Students

Math Problem Solving and Math Calculation Special Education Intervention and RTI

Guided Notes and Practice
Independent Practice
Foldable

Presented by

SHUBOX
Scholar

Fractions

for

High School Students
Math Problem Solving and Math Calculation
Special Education Intervention and RTI

This product was made with high school students in mind, who may have missed a step or two in math instruction, and can not tackle the demands of high school math courses with their current math knowledge. It is difficult to find resources that are not too childish – so this series was born!

It has been my experience, that no matter what testing or survey instrument is used, no matter what the age of the high school student, the first item they all showed a deficit in was fractions.
I think it is important to start with a level they are familiar with and build on it. So, this resource will start at the beginning and build upon itself.

I suggest storing the students' Intervention or RTI materials in a folder that can also be used as a lap book as well as a storage receptacle. This is convenient for periodical reviews and can also be very helpful if you are monitored!

Presented by:

SHUBOX
Scholar

Name Date

Fractions 

Fractions are part of a whole. If you have a _____ of a fish, you might want to tell someone how much of a fish you have. If you have this much  , you could say you have _____ of a fish. If you had this much  , you could say that you have _____ of a fish. _____ work the same way. As the numbers on the bottom (_____) get bigger, the parts get smaller. Also, when _____ or _____ numbers, much like fish, you need to have the same number on the bottom. In math language, this is called changing _____ fractions to _____ fractions. How hard would it be to tell someone you have  +  fish? To do this you would have to change the denominators to _____ _____. Multiples are found by multiplying the numbers until they have a number in common. For 2----2x3=6, 2x4=8, etc. For 3----2x3=6. We don't have to go any further- there is our common multiple- 6. We can now _____ ½ to 6ths by multiplying both top number (_____) and bottom number (_____) by the _____that will make the bottom number 6 which would be 3.

($\frac{1 \times 3=3}{2 \times 3=6}$ **, so ½ becomes** $\frac{3}{6}$ **which is a multiple of** $\frac{1}{2}$**.)**

To convert 1/3 to 6ths, multiply both top and bottom number by 2.

($\frac{1 \times 2=2}{3 \times 2=6}$ **so** $\frac{1}{3}$ **becomes** $\frac{2}{6}$**.) We can now add our fish together.**

$\frac{1}{2}=\frac{3}{6}$ $\frac{1}{3}=\frac{2}{6}$ **so,** $\frac{3}{6}+\frac{2}{6}=\frac{5}{6}$ **or about this much  fish!**

Name Date

Fractions

Note that when you add or subtract fractions, you add or subtract the top numbers, and the bottom numbers stay the same. Rest assured, you will not need to convert _____ very much at all in high school. However, you will need an understanding of how this works, and you will definitely hear the word _____ again.

Let's practice. Here are the steps you take to add unlike fractions.

$$\frac{1}{4} + \frac{2}{5} =$$

Step 1. Find a common multiple of 4 and 5. _____

Step 2. What number would you use to multiply 4 by to make it the number you found in step 1? _____

Step 3. Take this number and multiply both top and bottom number of $\frac{1}{4}$._____ You have now converted this fraction !

Step 4. What number would you use to multiply 5 by to make it the number you found in step 1? _____

Step 5. Take this number and multiply both top and bottom number of $\frac{2}{5}$._____ You have now converted this fraction !

Step 6. Rewrite the problem using the answers you wrote to step 3 and step 5 and then solve. (Remember- add the top numbers, and the bottom numbers stay the same.) _____

Name Date

Adding and Subtracting Unlike Fraction Practice

1. $\frac{1}{5} + \frac{2}{3} =$_____
Common Multiple_____
Convert to Like Fractions
_____
Solve_____

2. $\frac{2}{12} - \frac{1}{36} =$_____
Common Multiple_____
Convert to Like Fractions
_____
Solve_____

3. $\frac{3}{4} - \frac{1}{7} =$ _____
Common Multiple_____
Convert to Like Fractions
_____
Solve_____

4. $\frac{7}{21} + \frac{5}{42} =$_____
Common Multiple_____
Convert to Like Fractions
_____
Solve_____

5. $\frac{1}{6} + \frac{2}{9} =$_____
Common Multiple_____
Convert to Like Fractions
_____
Solve_____

6. $\frac{3}{10} + \frac{45}{100} =$_____
Common Multiple_____
Convert to Like Fractions
_____
Solve_____

7. $\frac{3}{10} - \frac{3}{20} =$_____
Common Multiple_____
Convert to Like Fractions
_____
Solve_____

8. $\frac{3}{16} + \frac{12}{32} =$ _____
Common Multiple_____
Convert to Like Fractions
_____
Solve_____

10. **Devian and Ashley went out for dinner. If Ashley ate $\frac{1}{5}$ of a her fish and Devian ate $\frac{1}{6}$ of his fish, how much fish did they eat altogether?**
What is the question asking?_____
What operation would you use in your equation? _____
Set up equation _____
Common Multiple_____ **Convert to Like Fractions**_____
Solve_____ _____

Name Date

Adding and Subtracting Unlike Fractions

$$\frac{1}{4}+\frac{2}{5}$$

1

Show examples here.

2

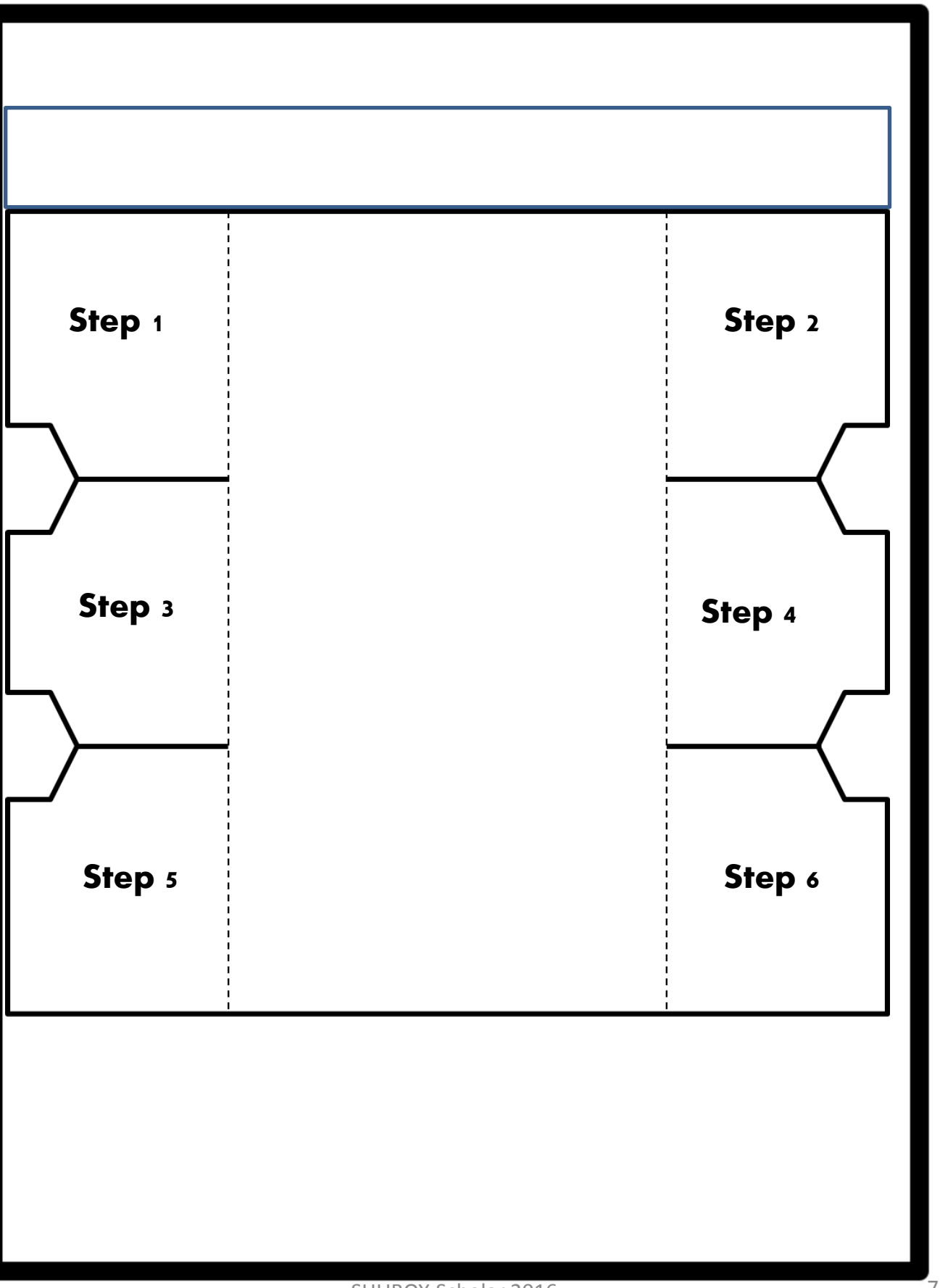
3

4

5

6

Name Date



Name Date

Fractions-KEY

Fractions are part of a whole. If you have a part of a fish, you might want to tell someone how much of a fish you have. If you have this much  , you could say you have ½ of a fish. If you had this much  , you could say that you have 1/3 of a fish. Numbers work the same way. As the numbers on the bottom (denominator) get bigger, the parts get smaller. Also, when adding or subtracting numbers, much like fish, you need to have the same number on the bottom.. In math language, this is called changing unlike fractions to like fractions. How hard would it be to tell someone you have  +  fish? To do this you would have to change the denominators to common multiples. Multiples are found by multiplying the numbers until they have a number in common. For 2---2x3=6, 2x4=8, etc. For 3---- 2x3=6. We don't have to go any further- there is our common multiple- 6. We can now convert ½ to 6ths by multiplying both top number (numerator) and bottom number (denominator) by the multiple that will make the bottom number 6 which would be 3. ($\frac{1 \times 3=3}{2 \times 3=6}$, so ½ becomes $\frac{3}{6}$ which is a multiple of $\frac{1}{2}$.) To convert 1/3 to 6ths, multiply both top and bottom number by 2. ($\frac{1 \times 2=2}{3 \times 2=6}$ so $\frac{1}{3}$ becomes $\frac{2}{6}$.) We can now add our fish together. ½=3/6 1/3=2/6 so, 3/6+2/6 =5/6 or about this much  fish!

Name Date

Note that when you add or subtract fractions, you add or subtract the top numbers, and the bottom numbers stay the same. Rest assured, you will not need to convert fractions very much at all in high school. However, you will need an understanding of how this works, and you will definitely hear the word multiples again.

Let's practice. Here are the steps you take to add unlike fractions.

1/4+2/5=

Step 1. Find a common multiple of 4 and 5. _____20

Step 2. What number would you use to multiply 4 by to make it the number you found in step 1? _____5

Step 3. Take this number and multiply both top and bottom number of 1/4._____5/20_____ You have now converted this fraction !

Step 4. What number would you use to multiply 5 by to make it the number you found in step 1? ___4

Step 5. Take this number and multiply both top and bottom number of 2/5._____8/20_____ You have now converted this fraction !

Step 6. Rewrite the problem using the answers you wrote to step 3 and step 5 and then solve. (Remember- add the top numbers, and the bottom numbers stay the same.) _____5/20+8/20=13/20

Name Date

Adding and Subtracting Unlike Fraction Practice

1. 1/5+2/3=_____ 13/15 _____
Common Multiple____15
Convert to Like Fractions
_____3/15+10/15_____
Solve_____13/15_____

2. 2/12-1/36=_____5/36_____ _
Common Multiple__ 36 __
Convert to Like Fractions
_____6/36-1/36_____
Solve_____5/36_____ _

3. ¾-1/7= ____ 17/28 ____
Common Multiple___28_
Convert to Like Fractions
_____21/28-4/28 _____
Solve_____17/28_____

4. 7/21+5/42=_____ 19/42 _____
Common Multiple__42____
Convert to Like Fractions
_____14/42+5/42_____
Solve_____19/42_____

5. 1/6+2/9=____ 7/18 _____
Common Multiple__18__
Convert to Like Fractions
_____3/18+4/18_____
Solve_____7/18_____

6. 3/10+45/100=_____
Common Multiple_____
Convert to Like Fractions
_____
Solve_____

7. 3/10-3/20=____3/20___ _____
Common Multiple__20__
Convert to Like Fractions
_____6/20-3/20_____
Solve_____3/20_____

8. 3/16+12/32= ____18/32____
Common Multiple__32_
Convert to Like Fractions
_____6/32+12/32_____
Solve_____18/32_____

10. **Devian and Ashley went out for dinner. If Ashley ate 1/5 of a her fish and Devian ate 1/6 of his fish, how much fish did they eat altogether?**
What is the question asking?_**How much fish altogether**____
What operation would you use in your equation? **Addition**
Set up equation _____1/5+1/6_____
Common Multiple__30__ **Convert to Like Fractions**__6/30+5/30_
Solve_____ 6/30+5/30=11/30_____

Thank you for downloading one of my resources!

SHUBOX Scholar

Please contact me with questions or suggestions at shuboxscholar@gmail.com

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