Pre-Algebra Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Per. \_\_\_\_\_\_ A or B

CC2 Ch. 2

**REDUCING FRACTIONS WS KEY**

(Mixed Numbers, Proper Fractions, & Improper Fractions)

**Directions**: REDUCE!!!!!!!!!!! ☺ ALL THE WAY!!!! Until you can’t anymore!!!!!!!!!!!

Every single problem on this worksheet will require you to reduce! For # 9 & 10, you may want to reduce first!

1.) Divide each # by 2 first , 2.) Divide each # by 2 first,

3.) Divide each # by 5 first, then 4.) Divide each # by 4

see if you can divide again.

5.) Both #s are even, so divide by 2 first, 6.) This one is tricky, but 17 is a

Then see if you can keep reducing… prime #, try dividing by 17 and

7.) Divide each # by 2 8.) Divide each # by 2 first, then

see if you can keep reducing…

9.) First, reduce 8/16 10.) First, reduce 88/40

**REPEATING DECIMALS TO FRACTIONS**

**Directions:**

1. NEVER put “***repeater bars***” within a faction ☹ No 🡪 ; ☺ (**Yes**)
2. If 1 digit repeats, place that number over **9**.
3. If 2 digits repeat, place that number over **99**.
4. If 3 digits repeat, place that number over **999**… etc!
5. REDUCE YOUR FINAL ANSWER (try dividing by 9 or 3 to get started).

**YOU TRY!** (Hint: they ALL need to be reduced!)

1. Change to a fraction. Show your work and **REDUCE by 9**!
2. Change to a fraction. Show your work and **REDUCE by 3**!
3. Change to a fraction. Show your work and **REDUCE by 3**!
4. Change to a fraction. Show your work and **REDUCE by 9**!
5. Change to a fraction. Show your work and **REDUCE by 3**!
6. Change to a fraction. Show your work and REDUCE! (You can’t reduce this one)

**REVIEWING HOW TO ADD & SUBTRACT MIXED NUMBERS!**

You usually have **2 options** when adding or subtracting mixed numbers.

I will show you the ***same example*** evaluated in ***two*** *different ways*… take a look! ☺

• **Option 1**:

* Leave the whole number part of the mixed numbers and just find the LCD of the fractions
* Then add/subtract the whole numbers, then add/subtract the fraction portions (careful, you may need to borrow from one of the whole numbers in order to subtract your fractions)
* Make sure your final answer is REDUCED!

Ex: (*The LCD = 20)*

Borrow from the 9 so we can subtract 15/20.

now subtract

• **Option 2**:

* Covert ALL fractions to **improper fractions**, find the LCD, then add or subtract the fractions
* Make sure your final answer is REDUCED!

Ex: turns into after making both mixed numbers improper.

🡪 With LCD of 20 you get 🡪

You can leave your answer as an improper fraction or a mixed number.

**NOTE**: No matter which of these two options you choose, work through the problem slowly and check that your final answer is reduced. ☺ Make sure to show your support work by showing your multiplication/addition/subtraction/division calculations. Do not do work in your head, please and thank you!