MINI LESSON #1: Fraction Operations (Unit 4- Math 7 Plus)

REVIEW

- **How do you change a mixed number to an improper fraction?**

$3\frac{1}{2}$ $4\frac{3}{5}$ $-1\frac{2}{3}$ $-5\frac{1}{3}$

- **How do you change an improper fraction into a mixed number?**

$\frac{9}{7}$ $\frac{16}{5}$ $\frac{-8}{3}$ $\frac{-15}{2}$

Steps for Adding and Subtracting Fractions

1) Make sure you have common denominators
2) Change all mixed numbers to improper fractions
3) Add or subtract numerators – **Use Integer Rules!**
4) Denominators stay the same
5) Reduce all final answers

Try These

1) $\frac{2}{3}+\frac{3}{5}$ 2) $-\frac{7}{8}+\frac{3}{4}$ 3) $5\frac{1}{3}-\frac{3}{4}$

4) $-4\frac{3}{5}+2\frac{1}{2}$ 5) $-4\frac{3}{5}-2\frac{1}{2}$ 6) $3\frac{1}{3}+-5\frac{2}{5}$

7) $-\frac{1}{2}-(-\frac{1}{3})$ 8) $-\frac{3}{7}-(-3\frac{1}{3})$

	9) Sally, her brother, and another partner own a pizza restaurant. If Sally owns 1/3 of the restaurant and her brother owns ¼ of the restaurant, what part does the third partner own? How do you know? 10) Mark has $\frac{1}{8}$ of a peanut butter pie, Chanel has $\frac{1}{5}$ of the pie, and CJ has $\frac{1}{4}$ of the pie. Together do they have a whole pie? If not, how much more of the pie do they need?
Steps for Multiplying Fractions	1) Change all mixed numbers to improper fractions 2) Cross simplify if possible 3) Multiply numerators - **Use Integer Rules!** 4) Multiply denominators – **Use Integer Rules!** 5) Reduce final fractions
Try These	1) $\frac{4}{9} \bullet \frac{3}{36}$ 2) $5\frac{1}{2} \bullet 1\frac{2}{3}$ 3) $-6 \bullet 1\frac{1}{4}$ 4) $-3\frac{2}{3} \bullet 1\frac{4}{11}$ 5) Ariel's English homework is to read 24 pages. She reads $\frac{1}{8}$ of the assignment on the bus ride home. How many pages does she read on the bus?
Steps for Dividing Fractions	1) Change all mixed numbers to improper fractions 2) Rewrite the division problem as a multiplication problem: -keep first fraction and multiply by the reciprocal of the second fraction 3) Multiply numerators - **Use Integer Rules!** 4) Multiply denominators – **Use Integer Rules!** 5) Reduce final fractions
Try These	1) $\frac{2}{3} \div 4$ 2) $1\frac{3}{4} \div -2\frac{5}{8}$ 3) $-\frac{1}{4} \div 1\frac{1}{2}$ 4) $-8 \div \frac{4}{7}$ 5) Joey has 12 ½ yards of material. A cape for a play takes $3\frac{5}{6}$ yards. How many capes can Joey make with the material?