

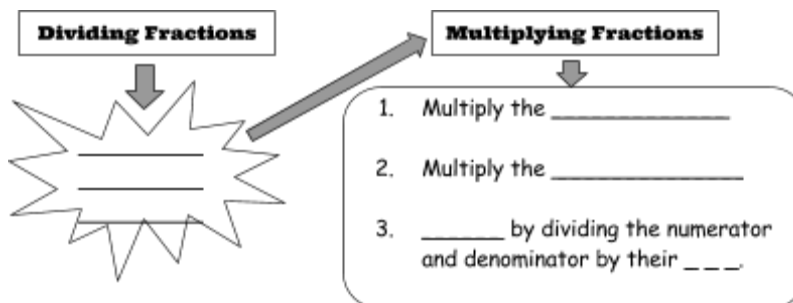
**Unit 1: Rational Numbers Study Guide****Adding and Subtracting Fractions****Fill in the blank:**

Steps to Add and Subtract Fractions

1. Find the \_\_\_\_\_ of the \_\_\_\_\_.
2. Rewrite fractions using \_\_\_\_\_ denominators.
3. Add/Sub \_\_\_\_\_.
4. ALWAYS \_\_\_\_\_.

**Evaluate the expressions (SHOW ALL WORK):**

1. $\frac{1}{2} + \frac{3}{5} =$	6. $\frac{7}{12} - \frac{3}{8} =$
2. $\frac{5}{13} + \frac{2}{3} =$	7. $\frac{4}{15} - \frac{11}{20} =$
3. $\frac{11}{15} + (-\frac{2}{5}) =$	8. $\frac{1}{12} + \frac{1}{12} =$
4. $6\frac{1}{2} + \frac{7}{9} =$	9. $\frac{5}{14} + (-\frac{5}{14}) =$
5. $2\frac{1}{3} + 4\frac{2}{3} - 1\frac{1}{2} =$	10. $\frac{5}{7} + 3\frac{1}{2} + \frac{1}{4} =$

**Multiplying and Dividing Fractions****Fill in the Flowchart:**

**Evaluate the expressions (SHOW ALL WORK):**

11. $\frac{7}{10} \times \frac{2}{21} =$	16. $(-\frac{1}{3}) \times 3\frac{1}{8} =$
12. $\frac{5}{9} \times \frac{7}{8} =$	17. $20 \div \frac{8}{15} =$
13. $(4\frac{1}{2})(4\frac{1}{2}) =$	18. $-7 \times (\frac{2}{9} + \frac{1}{9}) =$
14. $6\frac{1}{5} \div (-\frac{2}{3}) =$	19. $17\frac{2}{3} \div (-\frac{2}{3}) =$
15. $12 \div \frac{3}{5} =$	20. $\frac{4}{5} \cdot \frac{15}{16} =$

**WORD PROBLEMS**

Use the keywords to fill in either multiplications, division, addition or subtraction for each column. Then add one more key word to each column.

_____	_____	_____	_____
<i>PRODUCT, TIMES, TWICE AS MANY, TOTAL, TRIPLE</i>	<i>QUOTIENT, PER, FOR EACH, AVERAGE, SPLIT EQUALLY</i>	<i>SUM, TOTAL, MORE THAN, GREATER THAN, INCREASED</i>	<i>DIFFERENCE, LESS THAN, HOW MUCH MORE THAN,</i>
_____	_____	_____	_____

Use IPS to solve the word problems:

21. Deborah needs to make 16 costumes for the school play. Each costume requires $2\frac{1}{4}$ yards of material. How many yards of material will she need?	24. Belinda baked 9 pies that weigh $20\frac{1}{4}$ pounds total. How much does each pie weigh?
22. A runner jogs $5\frac{1}{4}$ miles east, $4\frac{1}{5}$ miles south, and $3\frac{3}{8}$ miles west. How far has she jogged?	25. If $2\frac{1}{3}$ ounce of cough syrup is used from a $4\frac{1}{9}$ ounce bottle, how much is left?
23. The Coffee Pub has cans of coffee that weigh $3\frac{1}{2}$ pounds each. The Pub has $8\frac{1}{2}$ cans of coffee left. What is the total weight of $8\frac{1}{2}$ cans?	26. A baker used $\frac{3}{4}$ cup of flour to make $\frac{1}{4}$ of a recipe. How much flour would the baker use to make the whole recipe?

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Block: \_\_\_\_\_