Unit 1: Rational Numbers Study Guide

Adding and Subtracting Fractions

Fill in the blank: The Butterfly Method:

Steps to Add and Subtract Fractions

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

Evaluate the expressions (SHOW ALL WORK):

|  |  |
| --- | --- |
|  | 6. |
| 2. | 7. |
| 3. | 8. |
| 4. | 9. |
| 5. | 10. |

Multiplying and Dividing Fractions

Fill in the Flowchart:



Evaluate the expressions (SHOW ALL WORK):

|  |  |
| --- | --- |
| 11.. | 16.. |
| 12.. | 17. |
| 13. | 18.. |
| 14. | 19. |
| 15. | 20. |

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.

|  |  |  |  |
| --- | --- | --- | --- |
| \_\_\_\_\_\_\_\_\_\_\_\_\_ | \_\_\_\_\_\_\_\_\_\_\_\_\_\_ | \_\_\_\_\_\_\_\_\_\_\_\_\_ | \_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Product, times, twice as many, total, triple  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Quotient, per, for each, average, split equally  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Sum, total, more than, Greater than, increased  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Difference, less than, how much more than,  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

Use IPS to solve the word problems:

|  |  |
| --- | --- |
| 21. Deborah needs to make 16 costumes for the school play. Each costume requires yards of material. How many yards of material will she need? | 24. Belinda baked 9 pies that weigh 20 pounds total. How much does each pie weigh? |
| 22. A runner jogs miles east, miles south, and miles west. How far has she jogged? | 25. If 2 ounce of cough syrup is used from a 4ounce bottle, how much is left? |
| 23. The Coffee Pub has cans of coffee that weigh pounds each. The Pub has 8½ cans of coffee left. What is the total weight of 8½ cans? | 26. A baker used cup of flour to make of a recipe. How much flour would the baker use to make the whole recipe? |