**TEACHER RESOURCE LIBRARY**

Grade 6 ~ ***Number Systems: Division of Fractions (6.NS.1)***

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| **Apply and extend previous understandings of multiplication and division to divide fractions by fractions.** | |
| **Resources** | 1. **Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions, e.g., by using visual fraction models and equations to represent the problem.** *For* *example, create a story context for (2/3) °“ (3/4) and use a visual fraction* *model to show the quotient; use the relationship between multiplication* *and division to explain that (2/3) °“ (3/4) = 8/9 because 3/4 of 8/9 is 2/3.* *(In general, (a/b) °“ (c/d) = ad/bc.) How much chocolate will each person* *get if 3 people share 1/2 lb of chocolate equally? How many 3/4-cup* *servings are in 2/3 of a cup of yogurt? How wide is a rectangular strip of* *land with length 3/4 mi and area 1/2 square mi?* |
| **My Stuff** |  |
| **Resource Books** | * **Elementary & Middle School Mathematics (VanDeWalle, 7th Ed.)**    + TEACHER CONTENT     - Meaning of Fractions in Division: p. 287     - Relationship between Multiplication and Division of Fractions: p. 311-312     - Division Types, Models, and Algorithms for Division of Fractions: p. 321-326     - Mixed Numerals and Improper Fractions: p. 296-297   + STUDENT ACTIVITIES     - Partitive Interpretation of Division: p. 321-323, Figure 16.12 & problems in dark print     - Measurement Interpretation of Division: p. 323, Figure 16.15 & problems in dark print     - Developing the Algorithm: p. 324-326, Figure 16.17 & problems in dark print * **Elementary & Middle School Mathematics (VanDeWalle, 6th Ed.)**   + TEACHER CONTENT     - Partition Concept of Division: p. 326-328     - Measurement Concept of Division: p. 328-329     - Developing the algorithm: p. 329-330   + STUDENT ACTIVITIES     - Partition Concept of Division: p. 327-328, Figure 17.2 & problems in dark print     - Measurement Concept of Division: p. 328-329, problems in dark print     - Developing the Algorithm: p. 329-330, Figures 17.14, 17.15, and 17.16, and problems in dark print * **Elementary Mathematics for Teachers (Parker, Baldridge, 2004) ISBN 0-9748140-0-8**   + TEACHER CONTENT     - Partitive and Measurement Division: p. 146-149     - Division of Fractions TEACHING SEQUENCE: p. 150-154     - Division Word Problems: p. 155-158 |
| **Web** | **Models and Algorithms**  TEACHER CONTENT   * **Math Forum - Teacher Tutorial** - <http://mathforum.org/dr.math/faq/faq.divide.fractions.html> * **Dividing Fractions - Teacher Tutorial** - <http://www.tpub.com/math1/5g.htm>   STUDENT ACTIVITIES/LESSONS   * **NLVM - Fraction Number Line Bars- Interactive Applet** -   <http://nlvm.usu.edu/en/nav/frames_asid_265_g_3_t_1.html?open>=activities&from=category\_g\_3\_t\_1.html   * **Visual Fractions - “Divide Fractions” - Interactive Applets and Game -** <http://www.visualfractions.com/divide.htm> * **UEN - “Modeling Multiplication and Division of Fractions” Lesson** - <http://www.uen.org/Lessonplan/preview.cgi?LPid=23394>   **Mixed Numbers and Improper Fractions**  STUDENT ACTIVITIES/LESSONS   * **LearnAlberta - “Improper Fractions and Mixed Numbers” Video Lesson** -   <http://www.learnalberta.ca/content/mesg/html/math6web/index.html?page=lessons&lesson=m6lessonshell02.swf>  **Lessons**  STUDENT ACTIVITIES/LESSONS   * **Illuminations “Feeding Frenzy” - Unit Rates; Multiply/Divide Fractions** - <http://illuminations.nctm.org/LessonDetail.aspx?id=L781> * **UEN - “Sticky Note Math” Lesson** - <http://www.uen.org/Lessonplan/preview?LPid=15443> * **UEN - “Dividing Fractions” Lesson** - <http://www.uen.org/Lessonplan/preview?LPid=530>1 |
| **Literature Connections** | The Doorbell Rang by Pat Hutchins  Full House: An Invitation to Fractions by Dayle Ann Dodds. |