

Fraction Misconceptions

Sherman, Richardson, and Yard (2005) suggest several reasons for students' difficulty in learning about fractional concepts and skills:

- a. They memorize procedures and rules before they have developed a conceptual understanding of the related concepts.
- b. Children over-generalize what they know about whole-number computation and apply this knowledge to fractions.
- c. Estimating rational numbers is more difficult than estimating whole numbers.
- d. Recording fractional notation is confusing if they don't yet understand what the top and bottom numbers represent.

Sherman, H.J., Richardson, L.I., & Yard, G. (2005). *Teaching children who struggle with Mathematics: A systematic approach to diagnosis and instruction*, Pearson Education, Inc.