Preservice Point of View: Representation of Numbers

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This section of our journal is designed to link teachers and future teachers. In each journal we will share responses to a mathematical concept task presented to students in classes for future teachers. The perspectives revealed in these responses should provide insights into increased understanding, reveal possible misconceptions, and suggest implications for improved instruction. It is our hope that this section of the journal will initiate a dialogue on concept development that will both better prepare our future teachers and reinforce the practices of current teachers. Working individually, students in an elementary mathematics methods course were given the following charge. This was given prior to the students having received any instruction about models for decimal numbers or models to represent division. These students have completed all of the mathematics courses they are required to take before becoming a licensed teacher. Before you read the pre-service responses, try it yourself OR ask your students!

Draw a diagram that illustrates the division problem

$$1.75 \div 0.5$$

be sure to indicate the dividend, divisor, and quotient. You may not use any words or numbers in your diagram. As you can see from the results show...

Click here for responses.