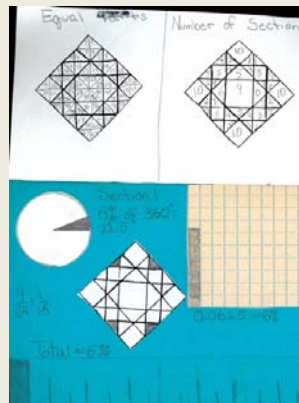


Alaska Math Network • 2008-2009

An Ongoing Dialogue on Mathematics Education

Mission Statement

Based on input from the network schools, we have created this network on conceptual and applied math. Our purpose is to deepen our understanding of mathematics and teaching mathematics in our schools. We will utilize data on student performance and research on best practices to inform our conversation. We also have an interest in teaching mathematics in a relevant, context specific, and culturally responsive manner. Our goal is to improve the math proficiency of our students. One indicator of this will be improved tests scores. Additionally, we hope that as teachers work together in and across schools, that an environment of collaboration and inquiry will evolve. Exactly what form our interactions and work will take will be determined by us as we work together.



Our Activities

Through our Elluminate Live! sessions, we engage in a collegial dialogue through sharing ideas, strategies and resources for effective mathematics instruction.

Sample Inquiry

- What questions do we have that can focus our learning together?
- What methods and activities do our colleagues use to teach the relationship between fractions, decimals and percents?
- How do the GLE's related to fractions, decimals and percents progress through the grades?
- How can teachers help students in making connections between fractions, decimals and percents?

Sample Problem

- a) Write the problem using fractions. *Two fifths plus one fifth.*
(Do not work out the answer just yet!)
- $$\frac{2}{5} + \frac{1}{5}$$
- b) Do you think the answer to this problem is more or less than $\frac{1}{2}$? Why?
I think it's more than $\frac{1}{2}$ since $\frac{2}{5}$ is almost one half of five.
- c) Draw a picture that shows the problem.
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- $$\frac{2}{5} + \frac{1}{5} = \frac{3}{5}$$
- d) What is the answer to the problem you wrote for part a? Show your work please ☺
How does your sum compare to your estimate from part b?
- $$\frac{2}{5} + \frac{1}{5} = \frac{2+1}{5} = \frac{3}{5} \quad \frac{3}{5} \text{ is more than } \frac{1}{2}.$$
- e) Write the same problem using decimals.
- $$\frac{2}{5} = \frac{4}{10} = 0.4 \quad 0.4 + 0.2$$
- $$\frac{1}{5} = \frac{2}{10} = 0.2$$
- f) What is the answer to the problem you wrote for part e? Show your work please ☺
- $$\begin{array}{r} 0.4 \\ + 0.2 \\ \hline 0.6 \end{array}$$
- g) Write the same problem using percentages.
- $$\frac{2}{5} = \frac{40}{100} = 40\%$$
- $$\frac{1}{5} = \frac{20}{100} = 20\%$$
- h) What is the answer to the problem you wrote for part g? Show your work please ☺
- $$\begin{array}{r} 40\% \\ + 20\% \\ \hline 60\% \end{array}$$

