ASM 1

Sam, Christine, and Tom drew the models below to help solve these addition problems. Match the problems they were solving with the models.

Under each model write the problem that matches it.

Equation A: $\frac{2}{4}+\frac{2}{8}=\frac{3}{4}$

Equation B: $\frac{1}{2}+\frac{2}{8}=\frac{3}{4}$

Equation C: $\frac{3}{8}+\frac{3}{8}=\frac{3}{4}$

Equation D: $\frac{4}{8}+\frac{2}{8}=\frac{3}{4}$

Sam's Model

Sam's Equation _____

Christine's Model

Christine's Equation _____

Tom's Model

Tom's Equation _____

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ASM 2

Look at the following equations.

Explain how it is possible to add different fractions and get the same sum.

Equation A: $\frac{5}{8}+\frac{3}{16}=\frac{13}{16}$

Equation B: $\frac{1}{2}+\frac{5}{16}=\frac{13}{16}$

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ASM 3

Two students were arguing.

Mike said that the sum of $\frac{1}{2}+\frac{1}{6}$ is the same as the sum of $\frac{1}{6}+\frac{1}{6}+\frac{1}{6}+\frac{1}{6}$.

Nick said that the sum of $\frac{1}{2}+\frac{1}{6}$ is **not** the same as the sum of $\frac{1}{6}+\frac{1}{6}+\frac{1}{6}+\frac{1}{6}$.

Which student is correct? Explain your answer.

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ASM 4

Is the following statement true or false?

$$\frac{7}{8} = \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8}$$

Explain why or why not.

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ASM 5

Look at the following equation.

$$\frac{1}{10} + \frac{1}{10} + \frac{1}{5} + \frac{1}{10} + \frac{1}{10} = \frac{5}{10}$$

Is the equation correct? Explain why or why not.

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ASM 6

Look at the following equation.

$$\frac{7}{6} = \frac{2}{6} + \frac{2}{6} + \frac{1}{6} + \frac{1}{6} + \frac{1}{6}$$

Is the equation correct? Explain why or why not.

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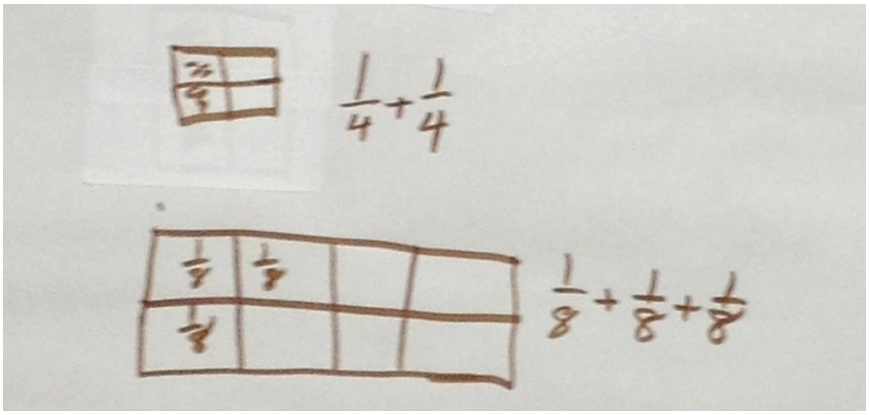
ASM 7

Kim drew the following models to add $\frac{2}{4} + \frac{3}{8}$.



Can she use these models to show the addition of $\frac{2}{4} + \frac{3}{8}$?

Explain why or why not?

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