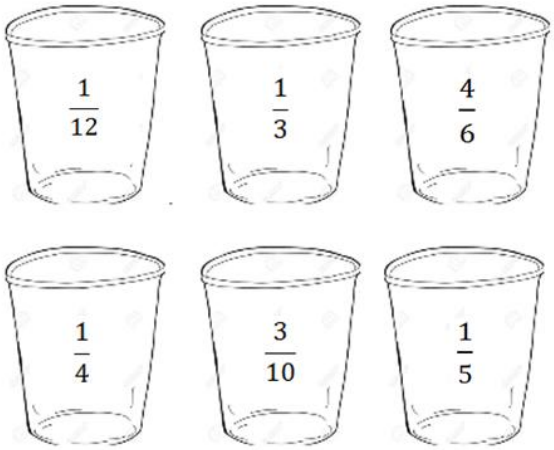
Pouring Paints Anchor Papers

Pouring Paints 1

At the end of art class, six tables had leftover blue paint. The amounts are shown below:



The art teacher asked Marie to combine two cups of paint into her empty cup. Her cup is the same size as the ones on the tables. Which containers could Marie combine into her paint cup without it overflowing? Show your math thinking using tools, pictures, words or numbers. .

Keep thinking!

Is there another way she could pour the paint? Why or why not? How close to a full cup can she get? Show your math thinking.

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STUDENT A

S: $\frac{2}{8}$ is equivalent to $\frac{1}{4}$. So if I put these 2 blue pieces with the $\frac{3}{4}$ it is a whole cup.

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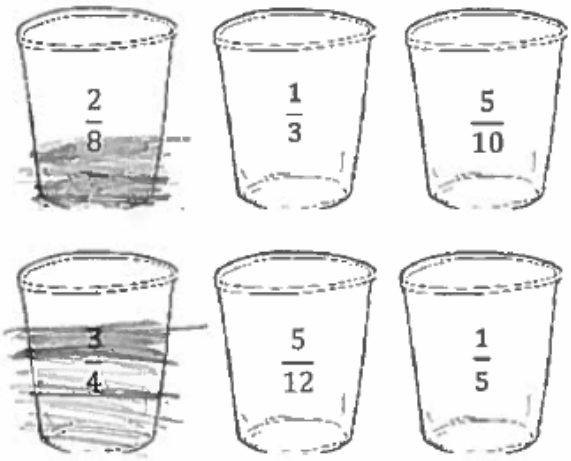
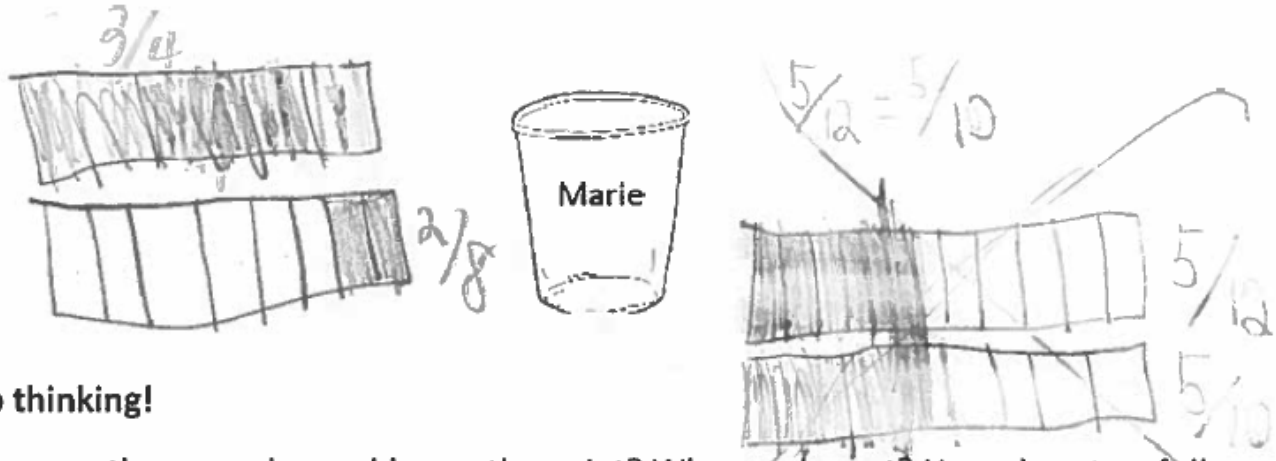
STUDENT B

At the end of art class, six tables had leftover blue paint. The amounts are shown below:



The art teacher asked Marie to combine two cups of paint into her empty cup. Her cup is the same size as the ones on the tables. Which containers could Marie combine into her paint cup without it overflowing? Show your math thinking.



Keep thinking!

Is there another way she could pour the paint? Why or why not? How close to a full cup can she get? Show your math thinking.

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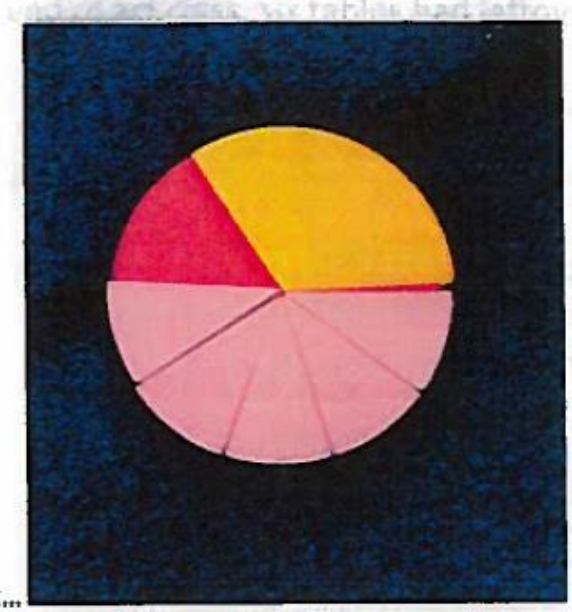
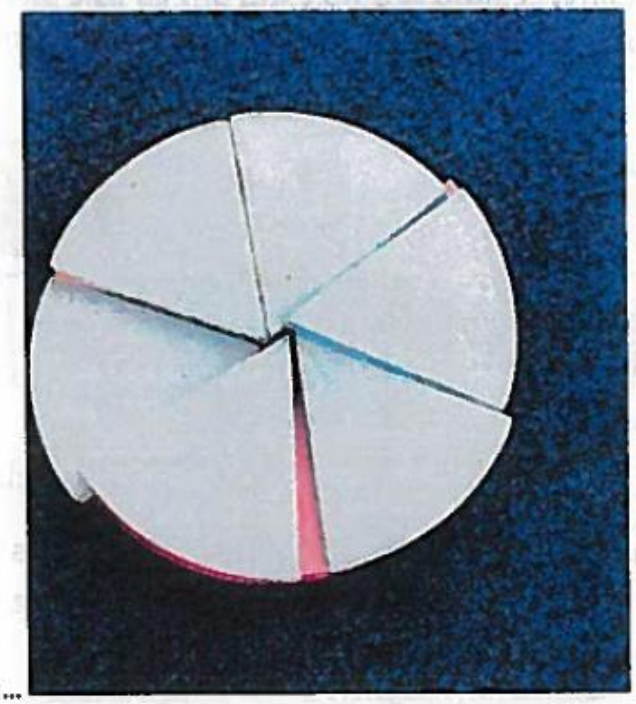
Student B Continued



First...

S: I knew that $\frac{1}{3}$ and $\frac{5}{10}$ would work because together they are less than 1 whole (points to fractions as he describes)

T: (Asks advancing question) how could you figure out how much of the paint cup is full?



Then...

T walks away.

S: The space that is left to fill is $\frac{1}{6}$ (points to blue piece and places it on red "empty" space) (Lays other blue pieces on top of the $\frac{1}{3}$ and $\frac{5}{10}$) That means that the cup is $\frac{5}{6}$ full.

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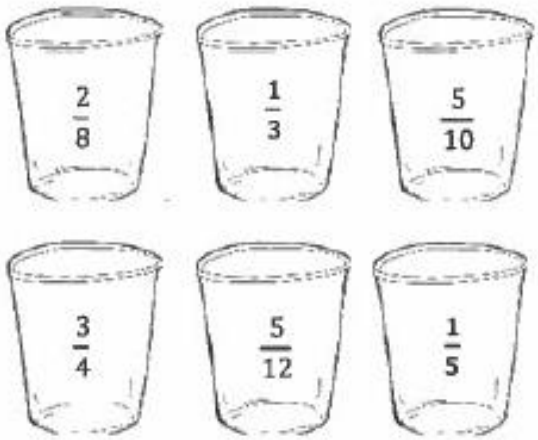
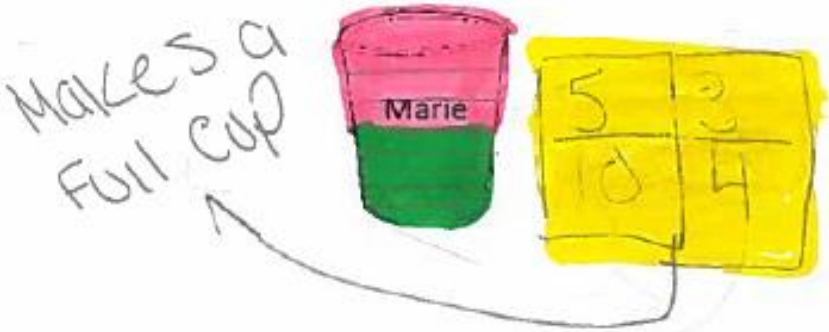
STUDENT C

At the end of art class, six tables had leftover blue paint. The amounts are shown below:



The art teacher asked Marie to combine two cups of paint into her empty cup. Her cup is the same size as the ones on the tables. Which containers could Marie combine into her paint cup without it overflowing? Show your math thinking.



Keep thinking!

Is there another way she could pour the paint? Why or why not? How close to a full cup can she get? Show your math thinking.

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STUDENT D

At the end of art class, six tables had leftover blue paint. The amounts are shown below:

S: These two pieces (points to the $\frac{2}{8}$ shaded) are the same as $\frac{1}{4}$ If we slid them up they would make 1 whole. (To explain further to the group, she laid fraction circles on top of the pieces they represented and "slid" up the $\frac{1}{8}$ and $\frac{1}{8}$ to show it making 1 whole fraction circles.)

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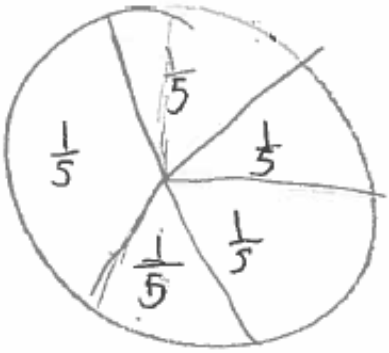
STUDENT E

$\frac{3}{4}$ $\frac{5}{12}$

$4 \times 12 = 48$
$12 \times 4 = 48$

$\frac{3 \times 12}{4 \times 12 = 48}$ $\frac{36}{}$

$\frac{5 \times 4}{12 \times 4 = 48}$ $\frac{20}{}$



$\frac{1}{3}$ and $\frac{1}{5}$ would work b/c it would be less than a half

$+\begin{array}{r} 36 \\ 20 \\ \hline 5.6 \end{array}$ $\frac{56}{48}$ These fraction's dont work b/c an improper fraction is more than a hole and in this case it overflowed b/c it's more than a cup

$\frac{1}{3}$ $\frac{1}{5}$

$3 \times 10 = 30$ $5 \times 6 = 30$

$\frac{1 \times 10 = 10}{3 \times 10 = 30}$ $\frac{1 \times 6 = 6}{5 \times 6 = 30}$ $10 + 6 = 16$

$\frac{16}{30}$ is more than half but less than a hole

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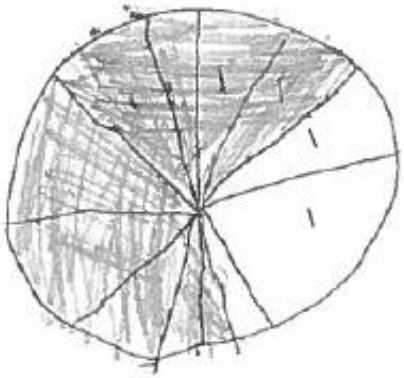
STUDENT F

$\frac{1}{3}$ and $\frac{5}{12}$ work because

it dosnt overflow and it almost

fills the whole can



I broke the thirds into twelves

$\frac{9}{12}$

I counted the pieces shaded into find $\frac{9}{12}$

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