Varied Fluency Questions

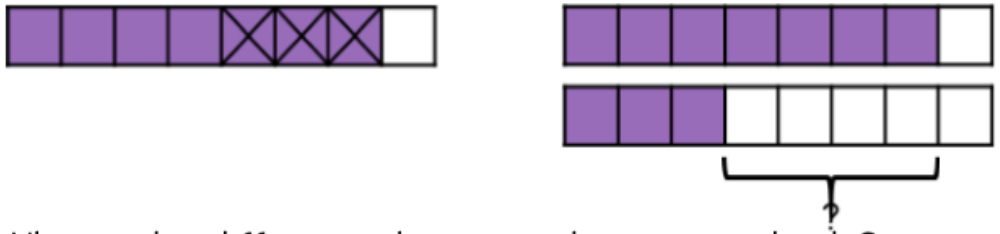
Here is a bar model to calculate $\frac{3}{5} + \frac{4}{5}$

$\frac{3}{5} + \frac{4}{5} = \frac{7}{5} = 1\frac{2}{5}$

Use a bar model to solve the calculations:

$\frac{3}{8} + \frac{3}{8}$ $\quad$ $\frac{5}{6} + \frac{1}{6}$ $\quad$ $\frac{5}{3} + \frac{5}{3}$

Here are two bar models to calculate $\frac{7}{8} - \frac{3}{8}$



What is the difference between the two methods?

Use your preferred method to calculate:

$\frac{5}{8} - \frac{1}{8}$ $\quad$ $\frac{9}{7} - \frac{4}{7}$ $\quad$ $\frac{5}{3} - \frac{5}{3}$ $\quad$ $1 - \frac{2}{5}$

Calculate:

$\frac{3}{7} + \frac{5}{7} = \frac{\square}{\square} + \frac{4}{7}$ $\quad$ $\frac{9}{5} - \frac{5}{5} = \frac{6}{5} - \frac{\square}{\square}$ $\quad$ $\frac{2}{3} + \frac{\square}{\square} = \frac{11}{3} - \frac{4}{3}$

How many different ways can you balance the equation?

$$\frac{5}{9} + \frac{\square}{9} = \frac{8}{9} + \frac{\square}{9}$$

Fay made two pies for a picnic.
1/6 of her apple pie and 1/6 of her cherry pie were left.
How much pie in total was eaten?

A chocolate bar has 12 equal pieces.

Amir eats $\frac{5}{12}$ more of the bar than Whitney.

There is one twelfth of the bar remaining.

What fraction of the bar does Amir eat?

What fraction of the bar does Whitney eat?

Tilly was working on a science project. To manage her time, she divided her project into 9 parts. If Tilly has already completed 4/9 of her project, how much of her project, in fraction form, does she have left?

Kalia brought 3 ¼ packages of balloons to decorate the gym. When they were done, there was ¾ of a package of balloons left. How many packages were used to decorate the gym?

Varied Fluency Answers

Here is a bar model to calculate $\frac{3}{5} + \frac{4}{5}$

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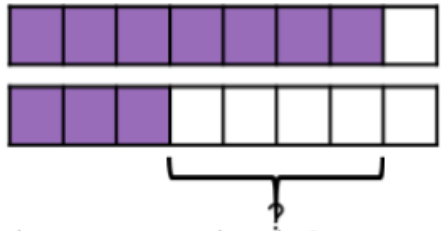
Use a bar model to solve the calculations:

$\frac{3}{8} + \frac{3}{8}$ $\quad$ $\frac{5}{6} + \frac{1}{6}$ $\quad$ $\frac{5}{3} + \frac{5}{3}$

Here are two bar models to calculate $\frac{7}{8} - \frac{3}{8}$



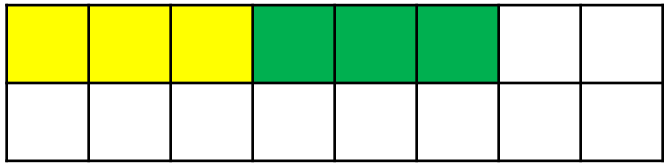
What is the difference between the two methods?

Use your preferred method to calculate:

$\frac{5}{8} - \frac{1}{8}$ $\quad$ $\frac{9}{7} - \frac{4}{7}$ $\quad$ $\frac{5}{3} - \frac{5}{3}$ $\quad$ $1 - \frac{2}{5}$

Calculate:

$\frac{3}{7} + \frac{5}{7} = \frac{\boxed{4}}{\boxed{7}} + \frac{4}{7}$ $\quad$ $\frac{9}{5} - \frac{5}{5} = \frac{6}{5} - \frac{\boxed{2}}{\boxed{5}}$ $\quad$ $\frac{2}{3} + \frac{\boxed{5}}{\boxed{3}} = \frac{11}{3} - \frac{4}{3}$



= 6/8

= 6/6 or 1

= 10/3 or 3 1/3

e.g. 7/8 – 3/8 = 4/8

- 5/8 – 1/8 = 4/8
- 9/7 – 4/7 = 5/7
- 5/3 – 5/3 = 0
- 1 – 2/5 = 3/5

*Please note that '1' is the same as saying 5/5 for this question.

Amir eats $\frac{8}{12}$ of the chocolate bar and Whitney eats $\frac{3}{12}$ of the chocolate bar.

Possible answers:

$$\frac{5}{9}+\frac{3}{9}=\frac{8}{9}+\frac{0}{9}$$

$$\frac{5}{9}+\frac{4}{9}=\frac{8}{9}+\frac{1}{9}$$

$$\frac{5}{9}+\frac{5}{9}=\frac{8}{9}+\frac{2}{9}$$

Any combination of fractions where the numerators add up to the same total on each side of the equals sign.

Fay made two pies for a picnic.
1/6 of her apple pie and 1/6 of her cherry pie were left. How much pie in total was eaten?

1/6 + 1/6 = **2/6 of pie was eaten**

Tilly was working on a science project. To manage her time, she divided her project into 9 parts. If Tilly has already completed 4/9 of her project, how much of her project, in fraction form, does she have left?

9 parts take away 4 parts of the project that has already been completed leaves her with **5 parts left.**

Kalia brought 3 ¼ packages of balloons to decorate the gym. When they were done, there was ¾ of a package of balloons left. How many packages were used to decorate the gym?

3 ¼ is the same as saying 13/4 (3 x 4 then plus 1 = 13)
13/4 – 3/4 = 10/4
10/4 was used to decorate.