Homework
Add Fractions

National Curriculum Objectives:

Mathematics Year 3: (3F4) Add and subtract fractions with the same denominator within one whole [for example, 5/7 + 1/7 = 6/7]
Mathematics Year 3: (3F10) Solve problems that involve the above objectives

Differentiation:

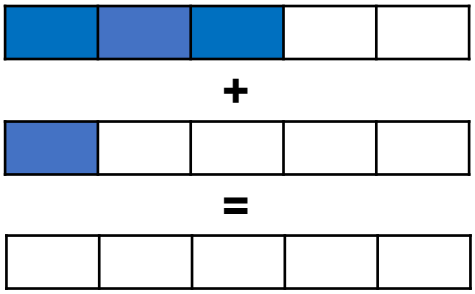
Questions 1, 4 and 7 (Varied Fluency)
Developing Use the bar models to complete the fraction number sentence. Fractions with a denominator less than 10, some digits provided.
Expected Use the bar models to complete the fraction number sentence. Fractions with a denominator less than 12.
Greater Depth Use the bar models to complete the fraction number sentence. Three fractions with a denominator less than 12, one which is equivalent.

Questions 2, 5 and 8 (Varied Fluency)
Developing Shade the image to show the total of an addition calculation. Fractions with a denominator less than 10. Image in calculation and answer.
Expected Shade the image to show the total of an addition calculation. Two or three fractions with a denominator less than 12. Image in answer only.
Greater Depth Shade the image to show the total of an addition calculation. Fractions with a denominator less than 12, one which is equivalent. Image in answer only.

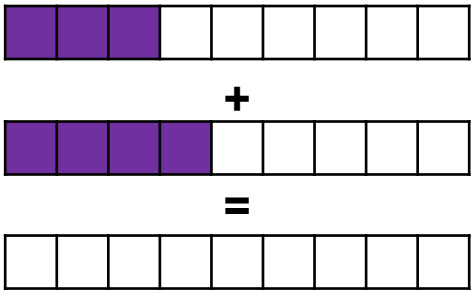
Questions 3, 6 and 9 (Reasoning and Problem Solving)
Developing Find fraction pairs to identify the correct statement. Fractions with a denominator less than 10. Pictorial support.
Expected Find fraction pairs to identify the correct statement. Fractions with a denominator less than 12.
Greater Depth Find sets of three fractions to identify the correct statement. Fractions with a denominator less than 12.

Add Fractions

1. Complete the bar model calculations and write down the number sentences underneath.



$\frac{3}{\square} + \frac{\square}{5} = \frac{\square}{\square}$



$\frac{\square}{\square} + \frac{4}{\square} = \frac{\square}{9}$

D

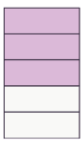
VF
HW/Ext

2. Shade the fraction to complete the addition calculation.

A.

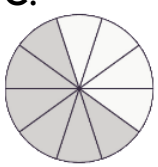
$\frac{1}{4} + \square = \square$

B.

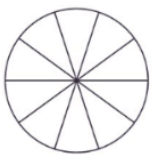


$+ \frac{1}{5} =$

C.

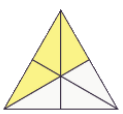


$+ \frac{3}{10} =$

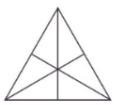


D.

$\frac{2}{6} +$



$=$



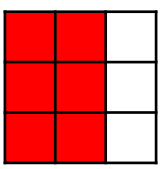
D

VF
HW/Ext

3. Bob and Fay are both adding fractions.

Bob says,

Adding two fractions, there are three different ways I can make $\frac{6}{9}$.



Fay says,

Adding two fractions, there are two different ways I can make $\frac{6}{9}$.

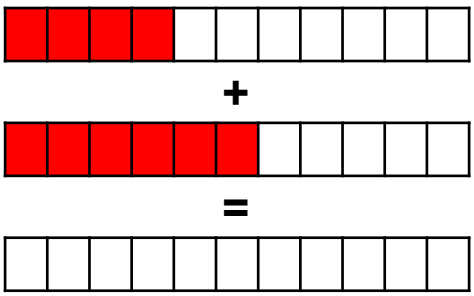
Who is correct? Explain your answer.

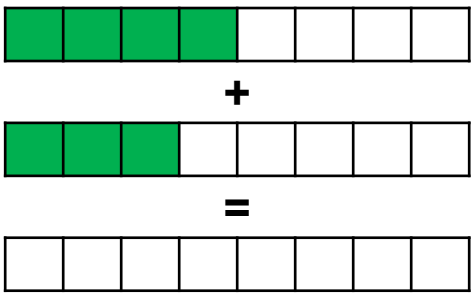
D

RPS
HW/Ext

Add Fractions

4. Complete the bar model calculations and write down the number sentences underneath.





$\square + \square = \square$

$\square + \square = \square$

E

VF
HW/Ext

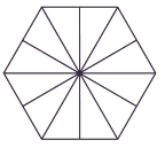
5. Shade the fraction to complete the addition calculation.

A.

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

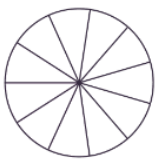
B.

$\frac{8}{12} + \frac{1}{12} =$



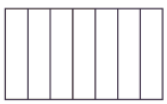
C.

$\frac{3}{11} + \frac{3}{11} + \frac{2}{11} =$



D.

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



E

VF
HW/Ext

6. Jill and Dave are both adding fractions.

Jill says,

Adding two fractions, there are three different ways I can make $\frac{8}{11}$.

Dave says,

Adding two fractions, there are four different ways I can make $\frac{8}{11}$.

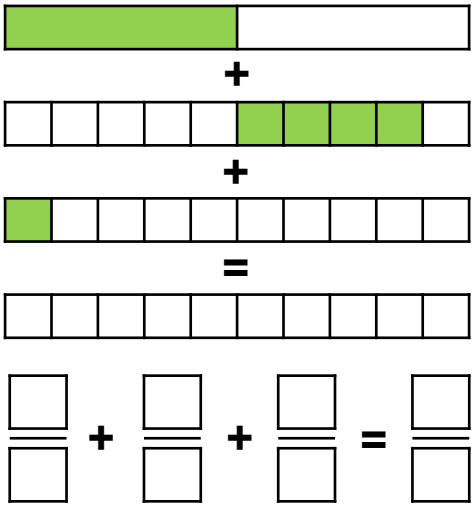
Who is correct? Explain your answer.

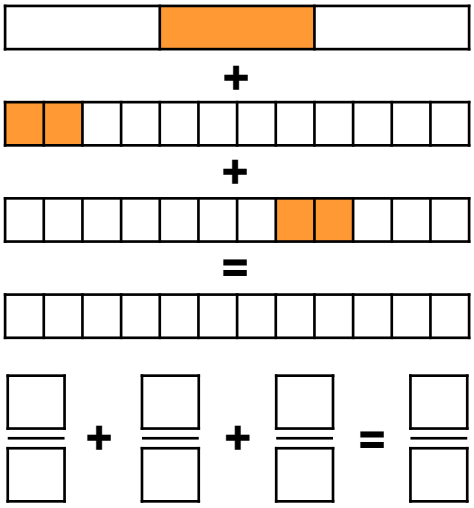
E

RPS
HW/Ext

Add Fractions

7. Complete the bar model calculations and write down the number sentences underneath.





GD

VF
HW/Ext

8. Shade the fraction to complete the addition calculation.

A.

$\frac{2}{10} + \frac{2}{5} =$

B.

$\frac{1}{3} + \frac{3}{6} =$

C.

$\frac{4}{8} + \frac{2}{4} =$

D.

$\frac{1}{2} + \frac{2}{8} =$

GD

VF
HW/Ext

9. Poppy and Mo are both adding fractions.

Poppy says,

Adding three fractions, there are three different ways I can make $\frac{6}{12}$.

Adding three fractions, there are nine different ways I can make $\frac{6}{12}$.

Mo says,

Who is correct? Explain your answer.

GD

RPS
HW/Ext

Homework
Add Fractions

Developing

1. 4 parts shaded: $\frac{3}{5} + \frac{1}{5} = \frac{4}{5}$; 7 parts shaded: $\frac{3}{9} + \frac{4}{9} = \frac{7}{9}$

2. A = all 4 parts shaded; B = any 4 parts shaded; C = any 9 parts shaded; D = any 5 parts shaded.

3. Bob is correct: $\frac{5}{9} + \frac{1}{9}$; $\frac{4}{9} + \frac{2}{9}$; $\frac{3}{9} + \frac{3}{9}$

Expected

4. 10 parts shaded: $\frac{4}{11} + \frac{6}{11} = \frac{10}{11}$; 7 parts shaded: $\frac{4}{8} + \frac{3}{8} = \frac{7}{8}$

5. A = any 7 parts shaded; B = any 9 parts shaded; C = any 8 parts shaded; D = any 6 parts shaded.

6. Dave is correct: $\frac{1}{11} + \frac{7}{11}$; $\frac{2}{11} + \frac{6}{11}$; $\frac{3}{11} + \frac{5}{11}$; $\frac{4}{11} + \frac{4}{11}$

Greater Depth

7. 10 parts shaded: $\frac{1}{2} + \frac{4}{10} + \frac{1}{10} = \frac{10}{10}$; 8 parts shaded: $\frac{1}{3} + \frac{2}{12} + \frac{2}{12} = \frac{8}{12}$

8. A = any 3 parts shaded; B = any 5 parts shaded; C = all 4 parts shaded; D = any 6 parts shaded.

9. Poppy is correct: $\frac{1}{12} + \frac{1}{12} + \frac{4}{12}$; $\frac{1}{12} + \frac{2}{12} + \frac{3}{12}$; $\frac{2}{12} + \frac{2}{12} + \frac{2}{12}$