

Homework/Extension

Step 9: Add 3 or More Fractions

National Curriculum Objectives:

Mathematics Year 5: (5F4) [Add and subtract fractions with the same denominator and denominators that are multiples of the same number](#)

Differentiation:

Questions 1, 4 and 7 (Varied Fluency)

Developing Complete the diagram and tick the correct answer, where two denominators are the same and the other denominator is either double or half. Models and pictorial representations used.

Expected Complete the diagram and tick the correct answer, where all denominators are direct multiples. Models and pictorial representations used.

Greater Depth Tick the correct answer, where denominators are not all direct multiples of each other.

Questions 2, 5 and 8 (Varied Fluency)

Developing Complete the comparison statement, where two denominators are the same and the other denominator is either double or half. Models and pictorial representations used.

Expected Complete the comparison statement, where all denominators are direct multiples. Models and pictorial representations used.

Greater Depth Complete the comparison statements, where denominators are not all direct multiples of each other.

Questions 3, 6 and 9 (Reasoning and Problem Solving)

Developing Arrange the digit cards to create an addition of three fractions that totals the target fraction, where two denominators are the same and the other denominator is either double or half.

Expected Arrange the digit cards to create an addition of three fractions that totals the target fraction, where all denominators are direct multiples.

Greater Depth Arrange the digit cards to create an addition of three fractions that totals the target fraction, where denominators are not all direct multiples of each other.

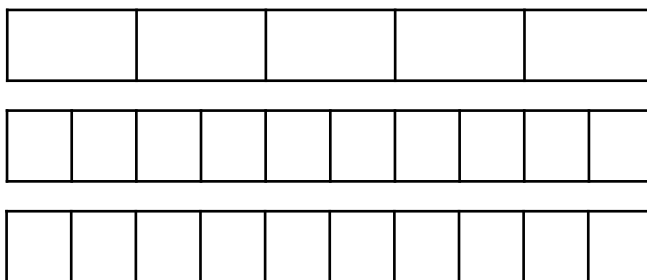
More [Year 5 Fractions](#) resources.

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Add 3 or More Fractions

1. Complete the bar model and tick the correct answer.

$$\frac{2}{5} + \frac{1}{10} + \frac{3}{10}$$



☐ $\frac{6}{25}$

☐ $\frac{8}{10}$

☐ $\frac{6}{10}$



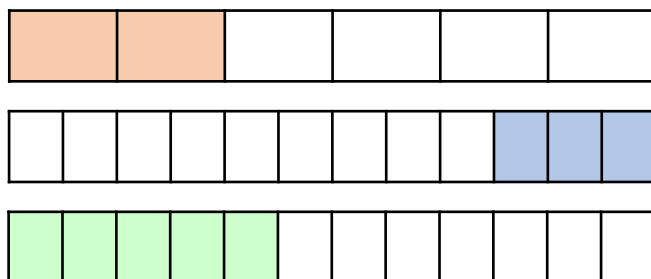
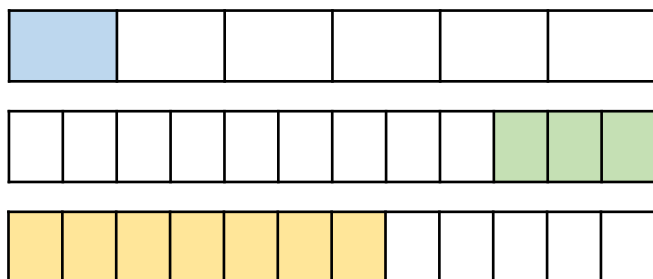
VF
HW/Ext

2. Using <, > or =, complete the comparison statement below.

$$\frac{1}{6} + \frac{3}{12} + \frac{7}{12}$$



$$\frac{2}{6} + \frac{3}{12} + \frac{5}{12}$$



VF
HW/Ext

3. Arrange the digit cards to create a calculation which has a total of $\frac{7}{8}$. You can use each card more than once.



$$\frac{\boxed{}}{4} + \frac{\boxed{}}{8} + \frac{\boxed{}}{8} = \frac{7}{8}$$



RPS
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Add 3 or More Fractions

4. Complete the bar model and tick the correct answer.

$$\frac{2}{3} + \frac{1}{9} + \frac{3}{18}$$

$\frac{17}{18}$

$\frac{6}{30}$

$\frac{6}{18}$



VF
HW/Ext

5. Using <, > or =, complete the comparison statement below.

$$\frac{1}{4} + \frac{2}{8} + \frac{3}{16}$$

$$\frac{1}{2} + \frac{1}{4} + \frac{2}{16}$$



VF
HW/Ext

6. Arrange the digit cards to create a calculation which has a total of $\frac{12}{15}$. You can use each card more than once.

1

2

3

4

5

6

7

8

$$\frac{\boxed{}}{\boxed{}} + \frac{\boxed{}}{15} + \frac{\boxed{}}{\boxed{}} = \frac{12}{15}$$



RPS
HW/Ext

Add 3 or More Fractions

7. Tick the correct answer.

$$\frac{1}{4} + \frac{2}{9} + \frac{1}{12}$$

☐ $\frac{20}{36}$

☐ $\frac{19}{36}$

☐ $\frac{21}{36}$



VF
HW/Ext

8. Using <, > or =, complete the comparison statements below.

$$\frac{1}{3} + \frac{2}{9} + \frac{5}{12} \quad \square \quad \frac{1}{3} + \frac{1}{9} + \frac{3}{12} \quad \square \quad \frac{1}{3} + \frac{2}{9} + \frac{4}{12}$$

$$\frac{1}{10} + \frac{3}{15} + \frac{3}{5} \quad \square \quad \frac{3}{10} + \frac{1}{15} + \frac{2}{5} \quad \square \quad \frac{4}{10} + \frac{3}{15} + \frac{1}{5}$$



VF
HW/Ext

9. Arrange the digit cards to create a calculation which has a total of $\frac{23}{24}$. You can use each card more than once. Every denominator is different.

1

2

3

4

5

6

7

8

$$\frac{\square}{\square} + \frac{\square}{\square} + \frac{\square}{\square} = \frac{23}{24}$$



RPS
HW/Ext

Homework/Extension

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Developing

1. $\frac{8}{10}$

2. =

3. Various answers, for example: $\frac{1}{4} + \frac{2}{8} + \frac{3}{8} = \frac{7}{8}$; $\frac{1}{4} + \frac{1}{8} + \frac{4}{8} = \frac{7}{8}$; $\frac{2}{4} + \frac{2}{8} + \frac{1}{8} = \frac{7}{8}$

Expected

4. $\frac{17}{18}$

5. <

6. Various answers, for example: $\frac{1}{5} + \frac{6}{15} + \frac{1}{5} = \frac{12}{15}$; $\frac{1}{3} + \frac{1}{15} + \frac{2}{5} = \frac{12}{15}$; $\frac{2}{3} + \frac{3}{15} + \frac{1}{5} = \frac{12}{15}$

Greater Depth

7. $\frac{20}{36}$

8. > and <; > and <

9. Various answers, for example: $\frac{1}{4} + \frac{2}{6} + \frac{3}{8} = \frac{23}{24}$; $\frac{1}{4} + \frac{1}{3} + \frac{3}{8} = \frac{23}{24}$; $\frac{1}{4} + \frac{3}{9} + \frac{3}{8} = \frac{23}{24}$