Varied Fluency
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:

Developing Questions to support adding 3 fractions together where 2 denominators are the same and the other denominator is either double or halve.

Expected Questions to support adding 3 or more fractions together where denominators are direct multiples of each other.

Greater Depth Questions to support adding 3 or more fractions together where denominators are not direct multiples of each other but have a common factor.

More Year 5 Fractions resources.

Did you like this resource? Don't forget to review it on our website.

Varied Fluency – Add 3 or More Fractions – Teaching Information

Add 3 or More Fractions

Add 3 or More Fractions

1a. Group the equivalent fractions.

$$\frac{1}{2} \qquad \frac{1}{3} \qquad \frac{1}{5}$$

$$\frac{2}{10} \qquad \frac{2}{4} \qquad \frac{2}{6}$$

VF

1b. Group the equivalent fractions.
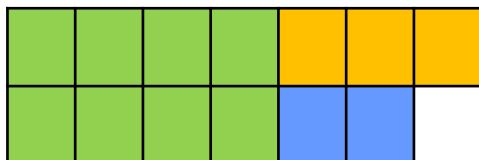
$$\frac{1}{4} \qquad \frac{1}{10} \qquad \frac{1}{6}$$

$$\frac{2}{20} \qquad \frac{2}{12} \qquad \frac{2}{8}$$

VF

**2a. True or false? Use the bar model to help you.**

$$\frac{4}{7} + \frac{3}{14} + \frac{1}{7} = \frac{13}{14}$$

VF

2b. True or false? Use the bar model to help you.

$$\frac{2}{6} + \frac{1}{6} + \frac{3}{12} = \frac{6}{12}$$

VF

3a. Complete the calculation.

$$\frac{2}{8} + \frac{3}{8} + \frac{1}{4} = \frac{\square}{\square}$$

VF

3b. Complete the calculation.

$$\frac{3}{9} + \frac{1}{9} + \frac{4}{18} = \frac{\square}{\square}$$

VF

4a. Match the calculations to the correct answers.

A) $\dfrac{1}{3} + \dfrac{2}{6} + \dfrac{1}{6} =$ $\dfrac{4}{6}$

    $\dfrac{10}{12}$

B) $\dfrac{3}{12} + \dfrac{1}{12} + \dfrac{3}{6} =$ $\dfrac{5}{6}$

VF

4b. Match the calculations to the correct answers.

A) $\dfrac{3}{10} + \dfrac{1}{10} + \dfrac{2}{5} =$ $\dfrac{9}{10}$

    $\dfrac{7}{10}$

B) $\dfrac{3}{5} + \dfrac{1}{10} + \dfrac{2}{10} =$ $\dfrac{8}{10}$

VF

5a. Group the equivalent fractions.

$$\frac{2}{7} \qquad \frac{1}{7} \qquad \frac{4}{7}$$

$$\frac{8}{56} \qquad \frac{6}{21} \qquad \frac{16}{28}$$

E ⭐ VF

5b. Group the equivalent fractions.

$$\frac{1}{9} \qquad \frac{3}{9} \qquad \frac{2}{9}$$

$$\frac{10}{45} \qquad \frac{4}{36} \qquad \frac{6}{18}$$
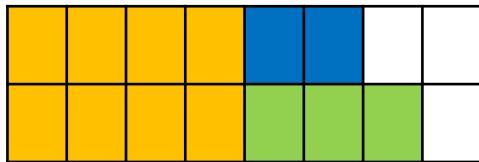
E ⭐ VF

6a. True or false? Use the bar model to help you.

$$\frac{1}{2} + \frac{3}{16} + \frac{1}{8} = \frac{12}{16}$$

E ⭐ VF

6b. True or false? Use the bar model to help you.

$$\frac{1}{4} + \frac{1}{2} + \frac{3}{20} = \frac{18}{20}$$

E ⭐ VF

7a. Complete the calculation.

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

E ⭐ VF

7b. Complete the calculation.

$$\frac{3}{14} + \frac{1}{7} + \frac{2}{28} = \frac{\square}{\square}$$

E ⭐ VF

8a. Match the calculations to the correct answers.

A) $\dfrac{2}{4} + \dfrac{2}{16} + \dfrac{1}{8} =$ $\qquad$ $\dfrac{12}{16}$

$\dfrac{11}{16}$

B) $\dfrac{2}{12} + \dfrac{1}{3} + \dfrac{2}{6} =$ $\qquad$ $\dfrac{10}{12}$

E ⭐ VF

8b. Match the calculations to the correct answers.

A) $\dfrac{2}{8} + \dfrac{3}{24} + \dfrac{1}{2} =$ $\qquad$ $\dfrac{22}{24}$

$\dfrac{21}{24}$

B) $\dfrac{1}{24} + \dfrac{3}{8} + \dfrac{2}{4} =$ $\qquad$ $\dfrac{20}{24}$

E ⭐ VF

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Varied Fluency – Add 3 or More Fractions – Year 5 Expected

9a. Group the equivalent fractions.

$$\frac{3}{11} \qquad \frac{5}{8} \qquad \frac{4}{6}$$

$$\frac{32}{48} \qquad \frac{21}{77} \qquad \frac{45}{72}$$

GD · VF

9b. Group the equivalent fractions.

$$\frac{7}{9} \qquad \frac{3}{12} \qquad \frac{6}{7}$$

$$\frac{36}{42} \qquad \frac{18}{72} \qquad \frac{42}{54}$$
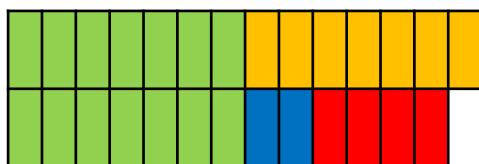
GD · VF

10a. True or false? Use the bar model to help you.
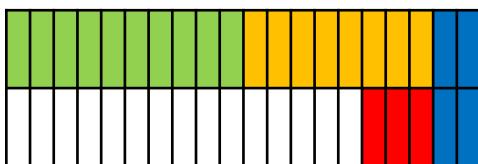
$$\frac{1}{2} + \frac{2}{28} + \frac{1}{4} + \frac{1}{7} = \frac{27}{28}$$

GD · VF

10b. True or false? Use the bar model to help you.

$$\frac{2}{8} + \frac{1}{5} + \frac{2}{20} + \frac{3}{40} = \frac{7}{40}$$

GD · VF

11a. Complete the calculation.

$$\frac{1}{3} + \frac{6}{30} + \frac{1}{15} + \frac{3}{10} = \frac{\square}{\square}$$

GD · VF

11b. Complete the calculation.

$$\frac{1}{18} + \frac{1}{6} + \frac{2}{9} + \frac{1}{2} = \frac{\square}{\square}$$

GD · VF

12a. Match the calculations to the correct answers.

$$A) \ \frac{5}{24} + \frac{3}{6} + \frac{1}{4} = \qquad \frac{16}{24}$$

$$\frac{20}{24}$$

$$B) \ \frac{1}{4} + \frac{1}{3} + \frac{2}{24} = \qquad \frac{23}{24}$$

GD · VF

12b. Match the calculations to the correct answers.

$$A) \ \frac{1}{36} + \frac{2}{4} + \frac{3}{9} = \qquad \frac{28}{36}$$

$$\frac{25}{36}$$

$$B) \ \frac{4}{9} + \frac{2}{12} + \frac{3}{36} = \qquad \frac{31}{36}$$

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Varied Fluency – Add 3 or More Fractions – Year 5 Greater Depth

Varied Fluency
Add 3 or More Fractions

Developing

1a. $\frac{1}{2} = \frac{2}{4}$, $\frac{1}{3} = \frac{2}{6}$, $\frac{1}{5} = \frac{2}{10}$

2a. True

3a. $\frac{7}{8}$

4a. A) $\frac{5}{6}$ B) $\frac{10}{12}$

Developing

1b. $\frac{1}{4} = \frac{2}{8}$, $\frac{1}{10} = \frac{2}{20}$, $\frac{1}{6} = \frac{2}{12}$

2b. False. The correct answer is $\frac{9}{12}$.

3b. $\frac{12}{18}$

4b. A) $\frac{8}{10}$ B) $\frac{9}{10}$

Expected

5a. $\frac{1}{7} = \frac{8}{56}$, $\frac{2}{7} = \frac{6}{21}$, $\frac{4}{7} = \frac{16}{28}$

6a. False. The correct answer is $\frac{13}{16}$.

7a. $\frac{13}{18}$

8a. A) $\frac{12}{16}$ B) $\frac{10}{12}$

Expected

5b. $\frac{1}{9} = \frac{4}{36}$, $\frac{2}{9} = \frac{10}{45}$, $\frac{3}{9} = \frac{6}{18}$

6b. True

7b. $\frac{12}{28}$

8b. A) $\frac{21}{24}$ B) $\frac{22}{24}$

Greater Depth

9a. $\frac{3}{11} = \frac{21}{77}$, $\frac{5}{8} = \frac{45}{72}$, $\frac{32}{48} = \frac{4}{6}$

10a. True

11a. $\frac{27}{30}$

12a. A) $\frac{23}{24}$ B) $\frac{16}{24}$

Greater Depth

9b. $\frac{7}{9} = \frac{42}{54}$, $\frac{3}{12} = \frac{18}{72}$, $\frac{6}{7} = \frac{36}{42}$

10b. False. The correct answer is $\frac{25}{40}$.

11b. $\frac{17}{18}$

12b. A) $\frac{31}{36}$ B) $\frac{25}{36}$

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