

Varied Fluency

Step 6: Add 2 or More Fractions

National Curriculum Objectives:

Mathematics Year 4: (4F4) [Add and subtract fractions with the same denominator](#)

Differentiation:

Developing Questions to support adding 2 or more fractions with the same denominator where answers are less than 1.

Expected Questions to support adding 2 or more fractions with the same denominator where answers are greater than 1.

Greater Depth Questions to support adding two or more fractions where answers are greater than 1. Using some fractions with denominators that are double or half of the previous fraction. Answers expressed as improper fractions and mixed numbers.

More [Year 4 Fractions](#) resources.

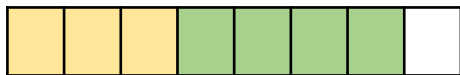
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Add 2 or More Fractions

Add 2 or More Fractions

1a. Use the model to complete the following calculation.

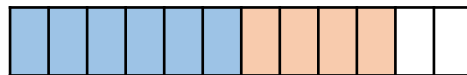
$$\frac{3}{8} + \frac{4}{8} = \frac{\square}{\square}$$



VF

1b. Use the model to complete the following calculation.

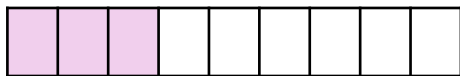
$$\frac{6}{12} + \frac{4}{12} = \frac{\square}{\square}$$



VF

2a. Complete the calculation below.

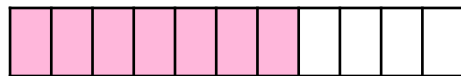
$$\frac{3}{9} + \frac{1}{9} + \frac{4}{9} = \frac{\square}{\square}$$



VF

2b. Complete the calculation below.

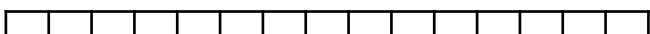
$$\frac{7}{11} + \frac{3}{11} = \frac{\square}{\square}$$



VF

3a. Tick the correct answer. Use the empty number line to help you.

$$\frac{6}{15} + \frac{5}{15} =$$



$\frac{11}{30}$

$\frac{10}{15}$

$\frac{11}{15}$



VF

3b. Tick the correct answer. Use the empty number line to help you.

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



$\frac{5}{7}$

$\frac{6}{21}$

$\frac{6}{7}$



VF

4a. Fill in the missing numbers below.

A. $\frac{8}{\square} + \frac{4}{14} = \frac{\square}{14} + \frac{5}{14} = \frac{\square}{14}$

B. $\frac{\square}{9} + \frac{6}{9} = \frac{4}{9} + \frac{3}{\square} = \frac{\square}{\square}$



VF

4b. Fill in the missing numbers below.

A. $\frac{9}{16} + \frac{6}{\square} = \frac{\square}{\square} + \frac{3}{16} = \frac{\square}{16}$

B. $\frac{\square}{\square} + \frac{5}{10} = \frac{4}{\square} + \frac{\square}{10} = \frac{9}{10}$



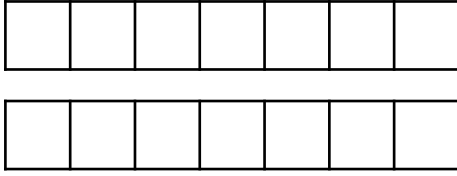
VF

Add 2 or More Fractions

Add 2 or More Fractions

5a. Shade the model to complete the following calculation.

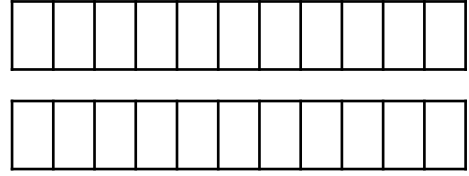
$$\frac{4}{7} + \frac{6}{7} = \frac{\square}{\square}$$



VF

5b. Shade the model to complete the following calculation.

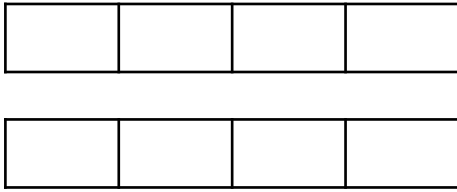
$$\frac{6}{11} + \frac{9}{11} = \frac{\square}{\square}$$



VF

6a. Complete the calculation below.

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



VF

6b. Complete the calculation below.

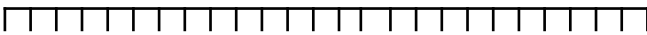
$$\frac{5}{6} + \frac{4}{6} + \frac{7}{6} = \frac{\square}{\square}$$



VF

7a. Tick the correct answer. Use the empty number line to help you.

$$\frac{8}{12} + \frac{7}{12} + \frac{9}{12} =$$



$$\frac{24}{36}$$

$$\frac{24}{12}$$

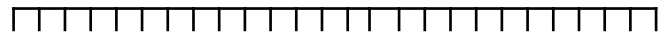
$$\frac{26}{12}$$



VF

7b. Tick the correct answer. Use the empty number line to help you.

$$\frac{11}{9} + \frac{5}{9} + \frac{7}{9} =$$



$$\frac{24}{9}$$

$$\frac{23}{27}$$

$$\frac{23}{9}$$



VF

8a. Fill in the missing numbers below.

A. $\frac{7}{\square} + \frac{6}{7} + \frac{2}{\square} = \frac{\square}{\square} + \frac{5}{7} = \frac{\square}{\square}$

B. $\frac{\square}{\square} + \frac{12}{15} + \frac{11}{\square} = \frac{17}{15} + \frac{\square}{\square} = \frac{32}{\square}$



VF

8b. Fill in the missing numbers below.

A. $\frac{16}{18} + \frac{7}{\square} + \frac{2}{\square} = \frac{\square}{\square} + \frac{11}{18} = \frac{\square}{\square}$

B. $\frac{\square}{\square} + \frac{11}{\square} + \frac{6}{\square} = \frac{17}{\square} + \frac{\square}{\square} = \frac{29}{8}$

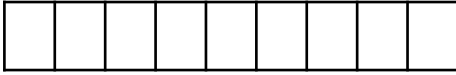


VF

Add 2 or More Fractions

9a. Shade the model to complete the following calculation.

$$\frac{3}{9} + \frac{4}{9} + \frac{10}{18} = \frac{\square}{\square} = \square \frac{\square}{\square}$$

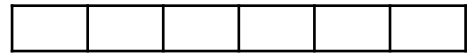
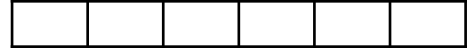
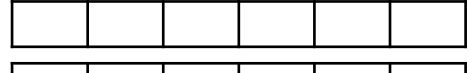


VF

Add 2 or More Fractions

9b. Shade the model to complete the following calculation.

$$\frac{7}{6} + \frac{4}{3} + \frac{2}{6} = \frac{\square}{\square} = \square \frac{\square}{\square}$$



VF

10a. Complete the calculation below.

$$\frac{7}{10} + \frac{6}{20} + \frac{1}{5} + \frac{4}{10} = \frac{\square}{\square} = \square \frac{\square}{\square}$$



VF

10b. Complete the calculation below.

$$\frac{4}{12} + \frac{3}{6} + \frac{4}{6} + \frac{10}{12} = \frac{\square}{\square} = \square \frac{\square}{\square}$$



VF

11a. Tick the correct answer.

$$\frac{2}{4} + \frac{7}{8} + \frac{14}{16} =$$

$$\frac{18}{16}$$

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

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



VF

11b. Tick the correct answer.

$$\frac{4}{10} + \frac{6}{5} + \frac{9}{10} + \frac{7}{5} =$$

$$3\frac{9}{15}$$

$$\frac{39}{30}$$

$$3\frac{9}{10}$$



VF

12a. Fill in the missing numbers below.

A. $\frac{1}{3} + \frac{5}{6} = \frac{\square}{12} + \frac{20}{24} = \frac{\square}{\square} = \square \frac{\square}{\square}$

B. $\frac{8}{6} + \frac{\square}{12} = \frac{38}{24} + \frac{18}{12} = \frac{\square}{\square} = \square \frac{\square}{\square}$



VF

12b. Fill in the missing numbers below.

A. $\frac{3}{4} + \frac{\square}{8} = \frac{12}{16} + \frac{6}{8} = \frac{\square}{\square} = \square \frac{\square}{\square}$

B. $\frac{7}{2} + \frac{9}{4} = \frac{\square}{8} + \frac{36}{16} = \frac{\square}{\square} = \square \frac{\square}{\square}$



VF

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Developing

1a. $\frac{7}{8}$

2a. $\frac{8}{9}$

3a. $\frac{11}{15}$

4a. A. $\frac{8}{14} + \frac{4}{14} = \frac{7}{14} + \frac{5}{14} = \frac{12}{14}$

B. $\frac{1}{9} + \frac{6}{9} = \frac{4}{9} + \frac{3}{9} = \frac{7}{9}$

Expected

5a. $\frac{10}{7}$

6a. $\frac{6}{4}$

7a. $\frac{24}{12}$

8a. A. $\frac{7}{7} + \frac{6}{7} + \frac{2}{7} = \frac{10}{7} + \frac{5}{7} = \frac{15}{7}$

B. $\frac{9}{15} + \frac{12}{15} + \frac{11}{15} = \frac{17}{15} + \frac{15}{15} = \frac{32}{15}$

Greater Depth

9a. Various answers, for example:

$$\frac{12}{9} = 1\frac{3}{9}$$

10a. Various answers, for example:

$$\frac{16}{10} = 1\frac{6}{10}$$

11a. $2\frac{1}{4}$

12a. A. $\frac{1}{3} + \frac{5}{6} = \frac{4}{12} + \frac{20}{12} = \frac{7}{6} = 1\frac{1}{6}$

B. $\frac{8}{6} + \frac{21}{12} = \frac{38}{24} + \frac{18}{24} = \frac{37}{12} = 3\frac{1}{12}$

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Developing

1b. $\frac{10}{12}$

2b. $\frac{10}{11}$

3b. $\frac{6}{7}$

4b. A. $\frac{9}{16} + \frac{6}{16} = \frac{12}{16} + \frac{3}{16} = \frac{15}{16}$

B. $\frac{4}{10} + \frac{5}{10} = \frac{4}{10} + \frac{5}{10} = \frac{9}{10}$

Expected

5b. $\frac{15}{11}$

6b. $\frac{16}{6}$

7b. $\frac{23}{9}$

8b. A. $\frac{16}{18} + \frac{7}{18} + \frac{2}{18} = \frac{14}{18} + \frac{11}{18} = \frac{25}{18}$

B. $\frac{12}{8} + \frac{11}{8} + \frac{6}{8} = \frac{17}{8} + \frac{12}{8} = \frac{29}{8}$

Greater Depth

9b. Various answers, for example:

$$\frac{17}{6} = 2\frac{5}{6}$$

10b. Various answers, for example:

$$\frac{14}{6} = 2\frac{2}{6}$$

11b. $3\frac{9}{10}$

12b. A. $\frac{3}{4} + \frac{6}{8} = \frac{12}{16} + \frac{6}{8} = \frac{12}{8} = 1\frac{4}{8}$

B. $\frac{7}{2} + \frac{9}{4} = \frac{28}{8} + \frac{36}{8} = \frac{23}{4} = 5\frac{3}{4}$