Varied Fluency
Step 3: Mixed Numbers to Improper Fractions

National Curriculum Objectives:

Mathematics Year 5: (5F2a) Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number [for example, 2/5 + 4/5 = 6/5 = 1 1/5]

Differentiation:

Developing Questions to support converting mixed numbers to improper fractions. Includes halves, thirds, quarters, fifths and tenths, and pictorial representations.
Expected Questions to support converting mixed numbers to improper fractions. Includes fractions up to twelfths and pictorial representations.
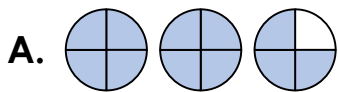Greater Depth Questions to support converting mixed numbers to improper fractions. Includes incomplete pictorial representations.
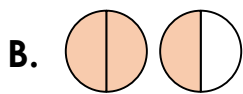
More Year 5 Fractions resources.

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

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1a. Convert the mixed numbers below to improper fractions.

A. $2\frac{3}{4} = \dfrac{\Box}{\Box}$

B. $1\frac{1}{2} = \dfrac{\Box}{\Box}$

VF

1b. Convert the mixed numbers below to improper fractions.

A. $3\frac{2}{3} = \dfrac{\Box}{\Box}$
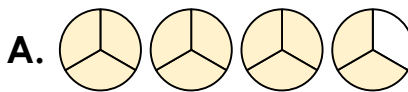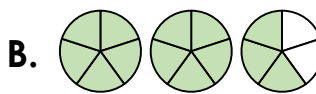
B. $2\frac{3}{5} = \dfrac{\Box}{\Box}$

VF

2a. Jenny and Jenna are converting mixed numbers to improper fractions.
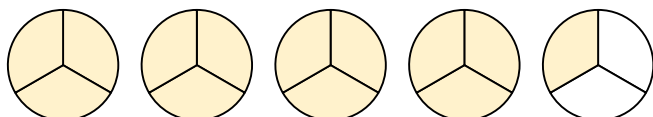
Jenny: I think $4\frac{1}{3}$ is the same as $\frac{13}{3}$.

Jenna: I think $4\frac{1}{3}$ is the same as $\frac{7}{3}$.

Who is correct?

VF

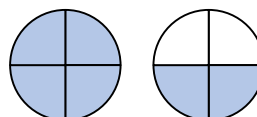**2b.** Dean and Dougie are converting mixed numbers to improper fractions.

Dean: I think $1\frac{2}{4}$ is the same as $\frac{8}{4}$.

Dougie: I think $1\frac{2}{4}$ is the same as $\frac{6}{4}$.

Who is correct?

VF

3a. Which number sentence is incorrect?

A. $= 1\frac{2}{4} = \frac{6}{4}$

B. $= 2\frac{2}{5} = \frac{9}{5}$

C. $= 1\frac{2}{3} = \frac{5}{3}$

VF

3b. Which number sentence is incorrect?

A. $= 1\frac{9}{10} = \frac{19}{10}$

B. $= 2\frac{1}{3} = \frac{7}{3}$

C. $= 1\frac{1}{2} = \frac{1}{2}$

VF

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4a. Convert the images below into mixed numbers and improper fractions.

A.

B.
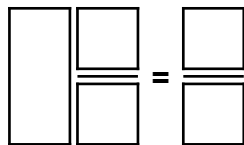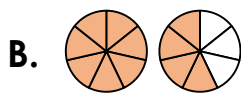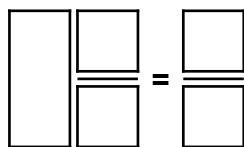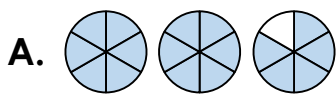
VF

4b. Convert the images below into mixed numbers and improper fractions.

A.

B.
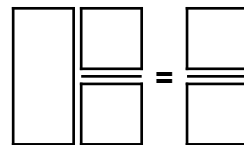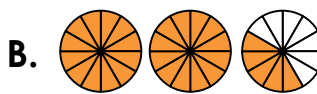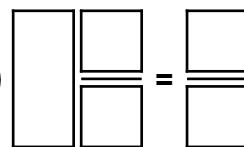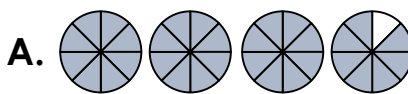
VF

5a. Karis and Tara are converting mixed numbers to improper fractions.

Karis: I think $2\frac{5}{8}$ is the same as $\frac{18}{8}$.

Tara: I think $2\frac{5}{8}$ is the same as $\frac{21}{8}$.

Who is correct?

VF

5b. Toby and Sam are converting mixed numbers to improper fractions.

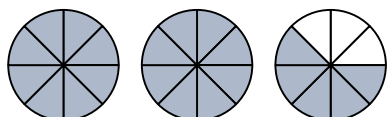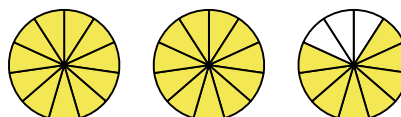**Toby:** I think $2\frac{8}{11}$ is the same as $\frac{30}{11}$.

Sam: I think $2\frac{8}{11}$ is the same as $\frac{28}{11}$.

Who is correct?

VF

6a. Which number sentence is incorrect?

A. $= 1\frac{2}{7} = \frac{13}{7}$

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

C. $= 1\frac{5}{8} = \frac{13}{8}$

VF

6b. Which number sentence is incorrect?

A. $= 1\frac{1}{5} = \frac{6}{5}$

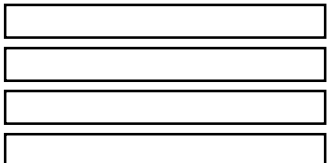B. $= 2\frac{2}{9} = \frac{20}{9}$

C. $= 3\frac{1}{2} = \frac{3}{2}$

VF

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Varied Fluency – Mixed Numbers to Improper Fractions – Year 5 Expected

7a. Complete the images and improper fractions below to match the mixed numbers.

A.

$2\frac{4}{6} = \dfrac{\square}{\square}$

B.
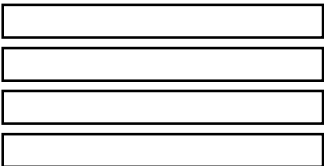
$3\frac{5}{7} = \dfrac{\square}{\square}$

7b. Complete the images and improper fractions below to match the mixed numbers.

A.

$3\frac{4}{9} = \dfrac{\square}{\square}$

B.

$1\frac{7}{12} = \dfrac{\square}{\square}$
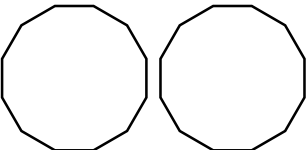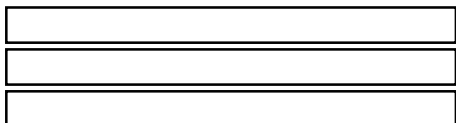
VF

8a. Gemma and Martha are converting mixed numbers to improper fractions.

Gemma: I think $2\frac{7}{9}$ is the same as $\frac{25}{9}$.

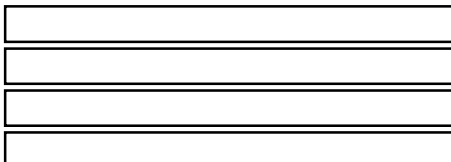Martha: I think $2\frac{7}{9}$ is the same as $\frac{23}{9}$.

Who is correct?

VF

8b. Gareth and Jamie are converting mixed numbers to improper fractions.

Gareth: I think $3\frac{5}{12}$ is the same as $\frac{39}{12}$.

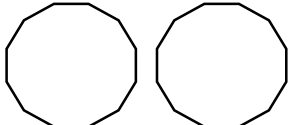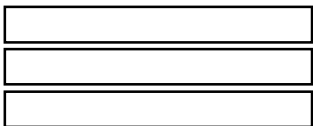Jamie: I think $3\frac{5}{12}$ is the same as $\frac{41}{12}$.

Who is correct?

VF

9a. Complete the images and missing digits to make the statements correct.
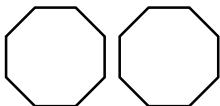
A. $= 3\frac{\square}{6} = \dfrac{20}{\square}$

B. $= 1\frac{8}{12} = \dfrac{\square}{12}$
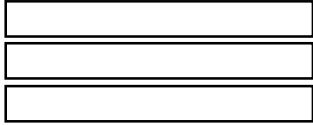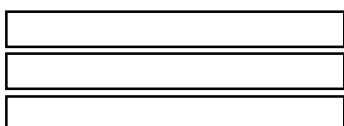
C. $= 2\frac{2}{\square} = \dfrac{\square}{7}$

VF

9b. Complete the images and missing digits to make the statements correct.

A. $= 1\frac{\square}{8} = \dfrac{14}{\square}$

B. $= 2\frac{4}{9} = \dfrac{\square}{9}$

C. $= 2\frac{3}{\square} = \dfrac{\square}{11}$

VF

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Varied Fluency – Mixed Numbers to Improper Fractions – Year 5 Greater Depth

Developing

1a. A = $\frac{11}{4}$; B = $\frac{3}{2}$

2a. Jenny is correct.

3a. B

Expected

4a. A = $2\frac{5}{6}$ = $\frac{17}{6}$; B = $1\frac{4}{7}$ = $\frac{11}{7}$

5a. Tara is correct.

6a. A

Greater Depth

7a. A = $\frac{16}{6}$; B = $\frac{26}{7}$

8a. Gemma is correct.

9a. A = $3\frac{2}{6}$ = $\frac{20}{6}$; B = $1\frac{8}{12}$ = $\frac{20}{12}$

C = $2\frac{2}{7}$ = $\frac{16}{7}$

Developing

1b. A = $\frac{11}{3}$; B = $\frac{13}{5}$

2b. Dougie is correct.

3b. C

Expected

4b. A = $3\frac{7}{8}$ = $\frac{31}{8}$; B = $2\frac{5}{12}$ = $\frac{29}{12}$

5b. Toby is correct.

6b. C

Greater Depth

7b. A = $\frac{31}{9}$; B = $\frac{19}{12}$

8b. Jamie is correct.

9b. A = $1\frac{6}{8}$ = $\frac{14}{8}$; B = $2\frac{4}{9}$ = $\frac{22}{9}$

C = $2\frac{3}{11}$ = $\frac{25}{11}$