

# 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 \[for example,  \$2/5 + 4/5 = 6/5 = 1 \frac{1}{5}\$ \]](#)

### Differentiation:

**Developing** Questions to support converting mixed numbers to improper fractions. Includes halves, thirds, quarters, fifths and tenths.

**Expected** Questions to support converting mixed numbers to improper fractions. Includes fractions up to twelfths.

**Greater Depth** Questions to support converting mixed numbers to improper fractions. Includes fractions up to twelfths and answers must be simplified.

More [Year 5 Fractions](#) resources.

Did you like this resource? Don't forget to [review](#) it on our website.

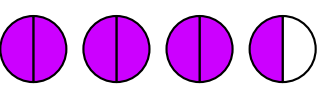
## Mixed Numbers to Improper Fractions

## Mixed Numbers to Improper Fractions

1a. Show each image as a mixed number fraction and an improper fraction.

A.  =  =

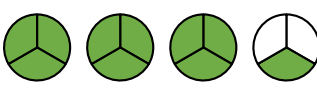
B.  =  =

C.  =  =

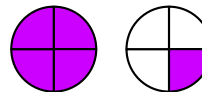


VF

1b. Show each image as a mixed number fraction and an improper fraction.

A.  =  =

B.  =  =

C.  =  =



VF

2a. True or false? Show your working.

$$2\frac{2}{3} = \frac{8}{3}$$



VF

2b. True or false? Show your working.

$$1\frac{8}{10} = \frac{16}{10}$$



VF

3a. Solve the word problem below.

Yuri is sorting sweets into bowls. One bowl can hold 5 sweets and Yuri has 38 sweets. How many bowls will Yuri fill? Write the answer as a mixed number and an improper fraction.



VF

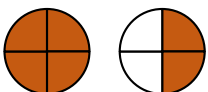
3b. Solve the word problem below.

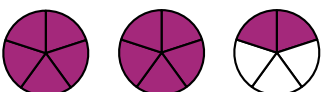
Tanya is putting shoes into boxes. One box can hold 2 shoes and Tanya has 17 shoes. How many boxes will Tanya fill? Write the answer as a mixed number and an improper fraction.



VF

4a. Which number sentence is incorrect?

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

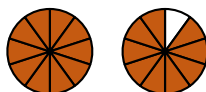
B.  =  $2\frac{2}{5} = \frac{9}{5}$

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



VF

4b. Which number sentence is incorrect?

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

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

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



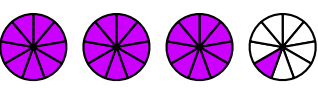
VF

## Mixed Numbers to Improper Fractions

5a. Show each image as a mixed number fraction and an improper fraction.

A.  =  =

B.  =  =

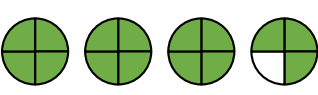
C.  =  =



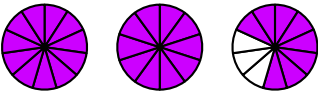
VF

## Mixed Numbers to Improper Fractions

5b. Show each image as a mixed number fraction and an improper fraction.

A.  =  =

B.  =  =

C.  =  =



VF

6a. True or false? Show your working.

$$4\frac{1}{11} = \frac{46}{11}$$



VF

6b. True or false? Show your working.

$$3\frac{5}{8} = \frac{29}{8}$$



VF

7a. Solve the word problem below.

Harry is putting books onto shelves. One shelf can hold 12 books and Harry has 68 books. How many shelves will Harry fill? Write the answer as a mixed number and an improper fraction.



VF

7b. Solve the word problem below.

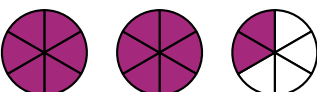
Sadie is putting stickers on cards. One card can fit 10 stickers and Sadie has 59 stickers. How many cards will Sadie fill? Write the answer as a mixed number and an improper fraction.



VF

8a. Which number sentence is incorrect?

A.  =  $1\frac{9}{7} = \frac{2}{7}$

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


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

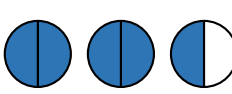


VF

8b. Which number sentence is incorrect?

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

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

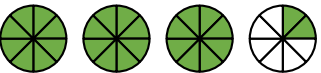
C.  =  $3\frac{1}{2} = \frac{3}{2}$



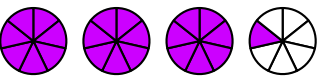
VF

## Mixed Numbers to Improper Fractions

9a. Show each image as a mixed number fraction and an improper fraction. Your answers must be simplified.

A.  =  =

B.  =  =

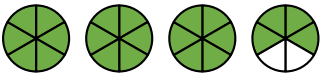
C.  =  =



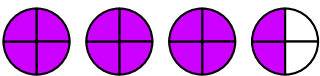
VF

## Mixed Numbers to Improper Fractions

9b. Show each image as a mixed number fraction and an improper fraction. Your answers must be simplified.

A.  =  =

B.  =  =

C.  =  =



VF

10a. True or false? Show your working.

$$5\frac{3}{12} = \frac{21}{4}$$



VF

10b. True or false? Show your working.

$$6\frac{6}{9} = \frac{19}{3}$$



VF

11a. Solve the word problem below.

Lottie is sorting eggs into boxes. One box can hold 9 eggs and Lottie has 69 eggs. How many boxes will Lottie fill? Write the answer as a mixed number and an improper fraction. Your answers must be simplified.



VF

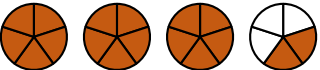
11b. Solve the word problem below.


Amir is putting toys into bags. One bag can hold 6 toys and Amir has 51 toys. How many bags will Amir fill? Write the answer as a mixed number and an improper fraction. Your answers must be simplified.

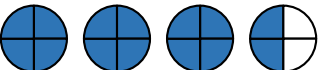


VF

12a. Which number sentence is incorrect?

A.  =  $3\frac{2}{5} = \frac{17}{5}$

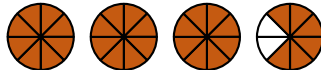
B.  =  $2\frac{8}{12} = \frac{8}{3}$


C.  =  $3\frac{2}{4} = \frac{6}{2}$




VF

12b. Which number sentence is incorrect?

A.  =  $3\frac{6}{8} = \frac{15}{4}$

B.  =  $2\frac{4}{10} = \frac{14}{5}$

C.  =  $3\frac{3}{12} = \frac{13}{4}$



VF

## Varied Fluency

### Mixed Numbers to Improper Fractions

#### Developing

1a.  $A = 1\frac{3}{4} = \frac{7}{4}$ ;  $B = 2\frac{3}{10} = \frac{23}{10}$ ;

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

2a. **True**

3a.  $7\frac{3}{5}$  and  $\frac{38}{5}$

4a. **B**

#### Expected

5a.  $A = 2\frac{2}{5} = \frac{12}{5}$ ;  $B = 2\frac{2}{3} = \frac{8}{3}$ ;

$C = 3\frac{1}{9} = \frac{28}{9}$

6a. **False**;  $4\frac{1}{11} = \frac{45}{11}$

7a.  $5\frac{8}{12}$  and  $\frac{68}{12}$

8a. **A**

#### Greater Depth

9a.  $A = 3\frac{1}{4} = \frac{13}{4}$ ;  $B = 2\frac{3}{5} = \frac{13}{5}$ ;

$C = 3\frac{1}{7} = \frac{22}{7}$

10a. **True**

11a.  $7\frac{2}{3}$  And  $\frac{23}{3}$

12a. **C**

## Varied Fluency

### Mixed Numbers to Improper Fractions

#### Developing

1b.  $A = 3\frac{1}{3} = \frac{10}{3}$ ;  $B = 1\frac{3}{5} = \frac{8}{5}$ ;

$C = 2\frac{1}{4} = \frac{9}{4}$

2b. **False**;  $1\frac{8}{10} = \frac{18}{10}$

3b.  $8\frac{1}{2}$  and  $\frac{17}{2}$

4b. **C**

#### Expected

5b.  $A = 3\frac{3}{4} = \frac{15}{4}$ ;  $B = 2\frac{3}{7} = \frac{17}{7}$ ;

$C = 2\frac{8}{11} = \frac{30}{11}$

6b. **True**

7b.  $5\frac{9}{10}$  and  $\frac{59}{10}$

8b. **C**

#### Greater Depth

9b.  $A = 3\frac{2}{3} = \frac{11}{3}$ ;  $B = 2\frac{4}{11} = \frac{26}{11}$ ;

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

10b. **False**;  $6\frac{6}{9} = \frac{60}{9} = \frac{20}{3}$

11b.  $8\frac{1}{2}$  and  $\frac{17}{2}$

12b. **B**