

Homework/Extension

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:

Questions 1, 4 and 7 (Varied Fluency)

Developing Convert the mixed numbers to improper fractions to complete the inequality statement. Includes thirds and tenths, and pictorial representations.

Expected Convert the mixed numbers to improper fractions to complete the inequality statement. Includes fractions up to twelfths and pictorial representations.

Greater Depth Convert the mixed numbers to improper fractions to complete the inequality statement. Includes fractions up to twelfths and incomplete pictorial representations.

Questions 2, 5 and 8 (Varied Fluency)

Developing Identify the missing numbers. Includes halves and quarters, and pictorial representations.

Expected Identify the missing numbers. Includes fractions up to twelfths and pictorial representations.

Greater Depth Identify the missing numbers. Includes fractions up to twelfths and incomplete pictorial representations.

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

Developing Identify whether the statement is true or false and explain why. Includes fifths and pictorial representations.

Expected Identify whether the statement is true or false and explain why. Includes pictorial representations.

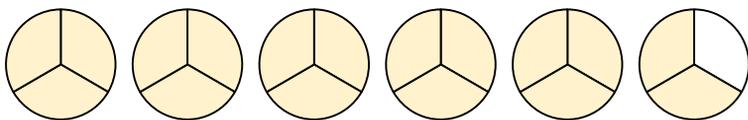
Greater Depth Identify whether the statement is true or false and explain why. Includes incomplete pictorial representations.

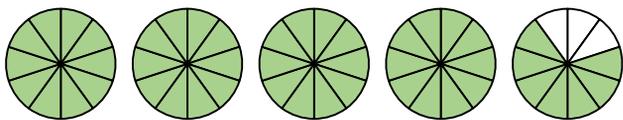
More [Year 5 Fractions](#) resources.

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

Mixed Numbers to Improper Fractions

1. Convert the mixed numbers to improper fractions and use $<$, $>$ or $=$ to complete the comparison statement.

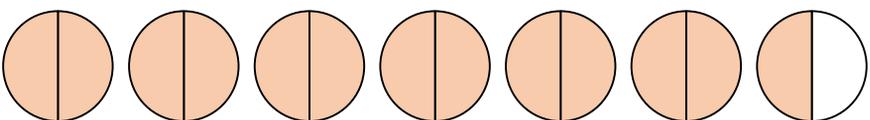
A.  $5 \frac{2}{3} = \frac{\square}{\square} \square \frac{17}{3}$

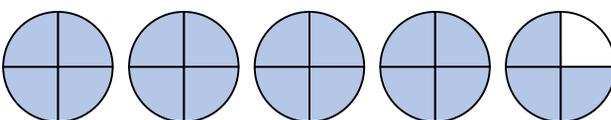
B.  $4 \frac{7}{10} = \frac{\square}{\square} \square \frac{43}{10}$



VF
HW/Ext

2. Identify the missing numbers.

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

B. $4 \frac{3}{4} = \frac{\square}{4}$ 



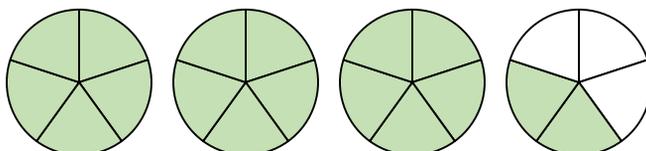
VF
HW/Ext

3. Sasha says,



Sasha

I think $3 \frac{2}{5}$ equals $\frac{15}{5}$.



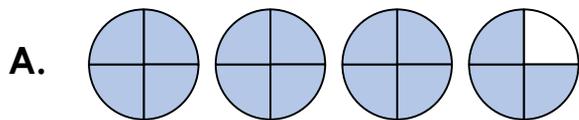
Is she correct? Explain your answer.



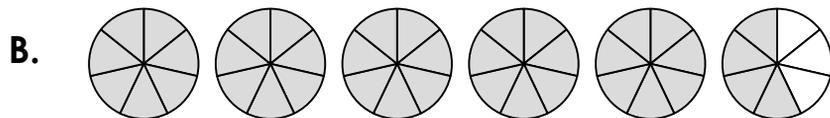
RPS
HW/Ext

Mixed Numbers to Improper Fractions

4. Convert the mixed numbers to improper fractions and use $<$, $>$ or $=$ to complete the comparison statement.



$$3 \frac{3}{4} = \frac{\square}{\square} \square \frac{14}{4}$$

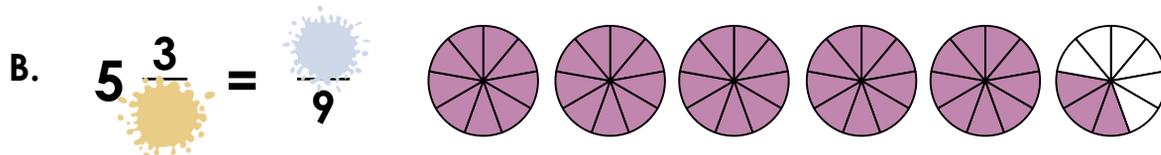
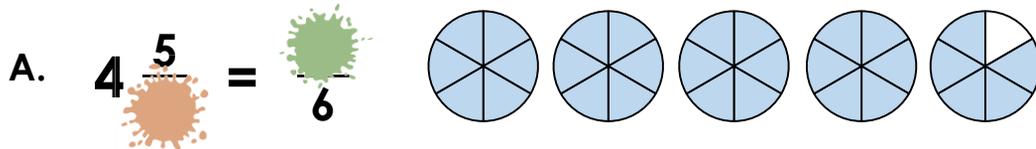


$$5 \frac{4}{7} = \frac{\square}{\square} \square \frac{59}{7}$$



VF
HW/Ext

5. Identify the missing numbers.



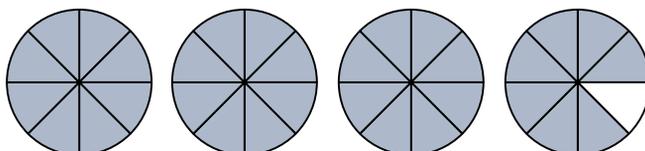
VF
HW/Ext

6. Raymond says,



Raymond

I think $3 \frac{7}{8}$ equals $\frac{21}{8}$.



Is he correct? Explain your answer.

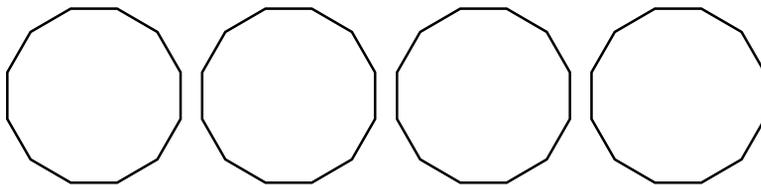


RPS
HW/Ext

Mixed Numbers to Improper Fractions

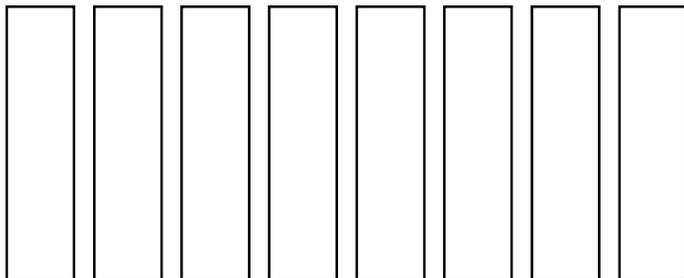
7. Complete the visual representations to convert the mixed numbers to improper fractions. Use $<$, $>$ or $=$ to complete the comparison statement.

A.



$$2 \frac{7}{12} = \frac{\boxed{}}{\boxed{}} \quad \boxed{} \frac{29}{12}$$

B.



$$6 \frac{9}{11} = \frac{\boxed{}}{\boxed{}} \quad \boxed{} \frac{75}{11}$$

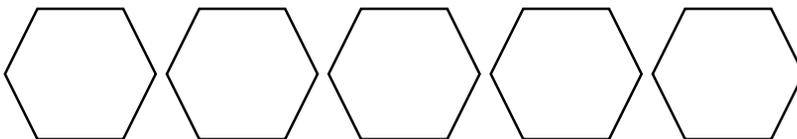


VF
HW/Ext

8. Identify the missing numbers.

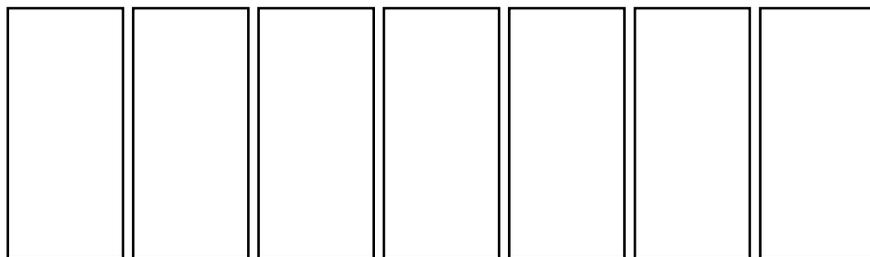
A.

$$3 \frac{7}{8} = \frac{\text{orange shape}}{8}$$



B.

$$4 \frac{6}{7} = \frac{\text{blue shape}}{7}$$



VF
HW/Ext

9. Raya says,



Raya

I think
 $4 \frac{8}{9}$ equals $\frac{44}{9}$.

Is she correct? Explain your answer.



RPS
HW/Ext

Homework/Extension

Mixed Numbers to Improper Fractions

Developing

1. A. $\frac{17}{3} = \frac{17}{3}$; B. $\frac{47}{10} > \frac{43}{10}$

2. A. $6 \frac{1}{2} = \frac{13}{2}$; B. $4 \frac{3}{4} = \frac{19}{4}$

3. Sasha is incorrect because she has multiplied the whole number with the denominator to get the new numerator but has not added the existing numerator to the multiplied number. The correct answer is $\frac{17}{5}$.

Expected

4. A. $\frac{15}{4} > \frac{14}{4}$; B. $\frac{39}{7} < \frac{59}{7}$

5. A. $4 \frac{5}{6} = \frac{29}{6}$; B. $5 \frac{3}{9} = \frac{48}{9}$

6. Raymond is incorrect because he has multiplied the whole number with the numerator to find the numerator for the improper fraction. He should have multiplied the whole number with the denominator and added the numerator to find the numerator for the improper fraction. The correct answer is $\frac{31}{8}$.

Greater Depth

7. A. $\frac{31}{12} > \frac{29}{12}$; B. $\frac{75}{11} = \frac{75}{11}$

8. A. $3 \frac{7}{8} = \frac{31}{8}$; B. $4 \frac{6}{7} = \frac{34}{7}$

9. Raya is correct because she has multiplied the whole number with the denominator and then added the numerator to find the improper fraction.