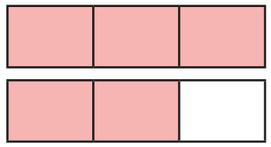
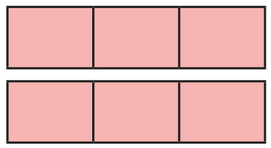
Convert mixed numbers to improper fractions

1 Write the mixed numbers and improper fractions shown by the bar models.



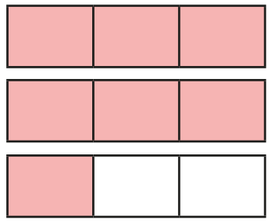
mixed number ☐

improper fraction $\frac{5}{3}$



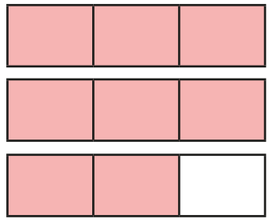
mixed number 2

improper fraction ☐



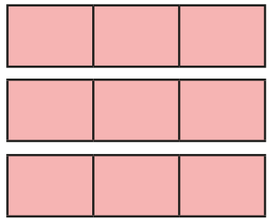
mixed number $2\frac{1}{3}$

improper fraction ☐



mixed number ☐

improper fraction ☐

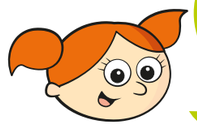


mixed number ☐

improper fraction ☐

What do you notice?

2 Alex is writing integers and improper fractions.



I can multiply the whole number by the denominator to convert it to an improper fraction.

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

$2 = \frac{8}{4}$

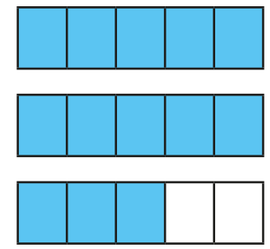
$3 = \frac{12}{4}$

Use Alex's method to write the integers as improper fractions.

a) $4 = \frac{\square}{4}$ **c)** $8 = \frac{\square}{2}$ **e)** $6 = \frac{\square}{5}$

b) $8 = \frac{\square}{4}$ **d)** $3 = \frac{\square}{5}$ **f)** $5 = \frac{\square}{6}$

3 Complete the sentences to convert the mixed number to an improper fraction.



The integer in the mixed number is ☐

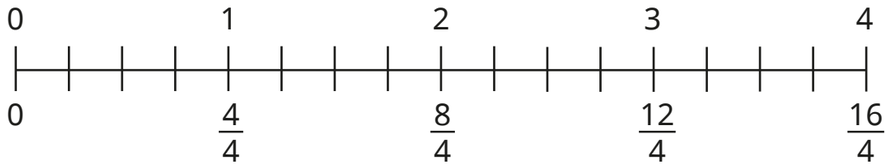
This is equivalent to ☐ fifths.

There are ☐ more fifths.

☐ + ☐ = ☐

So the improper fraction is ☐

4 Use the number line to convert the mixed numbers to improper fractions.



a) $1\frac{3}{4} =$ ☐ **b)** $3\frac{1}{4} =$ ☐ **c)** $2\frac{2}{4} =$ ☐

5 Convert the mixed numbers to improper fractions.

a) $3\frac{1}{6} =$ ☐ **c)** $6\frac{2}{3} =$ ☐

b) $2\frac{5}{7} =$ ☐ **d)** $8\frac{1}{2} =$ ☐

6 Convert the mixed numbers to improper fractions.

a) $3\frac{3}{4} =$ ☐ $3\frac{2}{4} =$ ☐ $3\frac{1}{4} =$ ☐

b) $4\frac{2}{3} =$ ☐ $5\frac{2}{3} =$ ☐ $6\frac{2}{3} =$ ☐

What do you notice?

7 Tiny has converted $4\frac{5}{8}$ to an improper fraction.

a) Explain how Tiny can use this fact to convert $4\frac{4}{8}$

b) Explain how Tiny can use this fact to convert $5\frac{5}{8}$

Talk about your answers with a partner.

c) Convert the mixed numbers to improper fractions.

$3\frac{5}{8} =$ ☐ $5\frac{6}{8} =$ ☐ $14\frac{5}{8} =$ ☐

8 What could the missing number be?

Write your answer as an improper fraction.

$$3\frac{5}{7} < \square < 5\frac{2}{7}$$

Compare answers with a partner.

White Rose MATHS