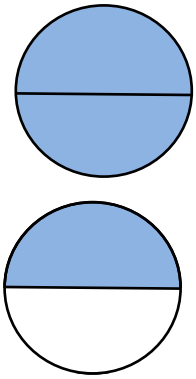
Introduction to Mixed Numbers and Improper Fractions

What are improper fractions and mixed numbers?

This basic fraction lesson is to introduce improper fractions and mixed numbers to students. We can interchange between these two types of fractions. Below are the explanations on basics of mixed numbers and improper fractions. So, let's start to explore mixed numbers and improper fractions.

1) Write an improper fraction and a mixed number for the colored parts of the circles given below:



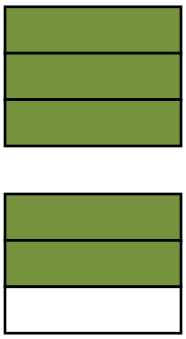
*Remember, the denominator for the improper fraction and mixed number is the number of sections in each shape (**2** in this case).*

Improper fraction = $\frac{Colorued\ parts\ in\ all\ the\ shpes}{Number\ of\ parts\ in\ \boldsymbol{each}\ shape} = \frac{\mathbf{3}}{\mathbf{2}}$

Mixed number = $Number\ of\ fully\ colored\ shpes\ \frac{Parts\ colored\ in\ remaining\ shape}{Number\ of\ parts\ in\ each\ shape} = 1\ \frac{\mathbf{1}}{\mathbf{2}}$

Note: Again, the denominator for both types is number of parts in each shape which is 2 for this example.

2) Write an improper fraction and mixed number for the colored parts.



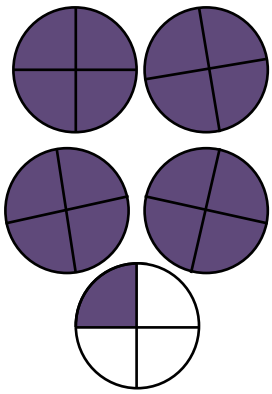
*Remember, the denominator for the improper fraction and mixed number is the number of sections in each shape (**3** in this case).*

Improper fraction = $\frac{Colorued\ parts\ in\ all\ the\ shpes}{Number\ of\ parts\ in\ \boldsymbol{each}\ shape} = \frac{\mathbf{5}}{\mathbf{3}}$

Mixed number = $Number\ of\ fully\ colored\ shpes\ \frac{Parts\ colored\ in\ remaining\ shape}{Number\ of\ parts\ in\ each\ shape} = 1\ \frac{\mathbf{2}}{\mathbf{3}}$

Note: Again, the denominator for both types is number of parts in each shape which is 3 for this example.

3) Write an improper fraction and a mixed number for the colored parts.



*Remember, the denominator for the improper fraction and mixed number is the number of sections in each shape (**4** in this case).*

Improper fraction = $\frac{Colorued\ parts\ in\ all\ the\ shpes}{Number\ of\ parts\ in\ \boldsymbol{each}\ shape} = \frac{\mathbf{17}}{\mathbf{4}}$

Mixed number = $Number\ of\ whole\ shpes\ \frac{Parts\ colored\ in\ remaining\ shape}{Number\ of\ parts\ in\ each\ shape} = 4\ \frac{\mathbf{1}}{\mathbf{4}}$

Note: Again, the denominator for both types is number of parts in each shape which is 4 for this example.