Introducing:

• mixed fraction
• fraction form
• Improper fraction

WHOLE OR MIXED FORM

$1 \frac{2}{3}$

TO FRACTION FORM

$= \frac{5}{3}$
This picture shows the fraction $1 \frac{2}{3}$. The complete circle on the left is selected and $\frac{2}{3}$ of the other circle is selected. A fraction such as $1 \frac{2}{3}$ that has a whole number part and a fraction part is a *mixed fraction*. 
Every whole number or mixed fraction can be written in fraction \((\frac{a}{b})\) form. You can calculate the fraction form for \(1 \frac{2}{3}\) by multiplying the whole number 1 by the denominator 3 and then adding the numerator 2 for a numerator of 5 in the fraction form.
The picture shows that there are 5 one-third units or \( \frac{5}{3} \).

Also, you can think of the unit 1 as \( \frac{3}{3} \). Add \( \frac{3}{3} \) to the partial unit \( \frac{2}{3} \) for the fraction form \( \frac{5}{3} \). This picture shows that \( 1 \ \frac{2}{3} = \frac{3}{3} + \frac{2}{3} = \frac{5}{3} \).

Some texts call the fraction form an *improper fraction*. This is misleading because there is nothing improper about \( \frac{5}{3} \).
The same amount, $1 \frac{2}{3}$, is shown with a number line.
The amount shown at the arrow can be written as \(3 \frac{1}{4}\) or \(\frac{13}{4}\). Notice that there are 13 marks from zero to the arrow.
This picture shows the *mixed fraction* $2 \frac{5}{8}$. If you were to count all the parts that are colored you would have a total of 21 parts, giving the numerator for the fraction $\frac{21}{8}$.
Since each unit or circle has 8 parts, each completely colored circle can be written as $\frac{8}{8}$. This gives us $\frac{8}{8} + \frac{8}{8} + \frac{5}{8}$ circles for $\frac{21}{8}$ circles.
Or you can multiply the whole number 2 times the denominator 8 and then add the numerator 5 for a numerator of 21 in the fraction form.
To write the whole number 4 in fraction form simply write the whole number 4 over the denominator 1.

\[
4 = \frac{4\times1+0}{1} = \frac{4}{1}
\]
What is in $3 \frac{3}{5}$ fraction form?
Mixed Form To Fraction Form

WHOLE OR MIXED FORM: 3 $\frac{3}{5}$

TO FRACTION FORM: $\frac{3 \times 5 + 3}{5} = \frac{18}{5}$

Multiply the whole number 3 by the denominator 5. Then add the numerator 3 for the fraction numerator 18.
What is in 3 fraction form?
Mixed Form To Fraction Form 13

WHOLE OR MIXED FORM  \[ \frac{3}{1} \]

TO FRACTION FORM  \[ \frac{3 \times 1 + 0}{1} \]

Multiply the whole number 3 by the denominator 1.
Then add the numerator 0 for the fraction numerator 3.