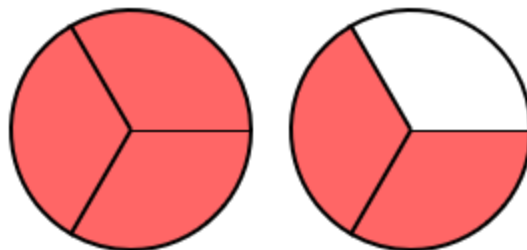


Mixed Form to Fraction Form

Introducing:

- mixed fraction
- fraction form
- Improper fraction



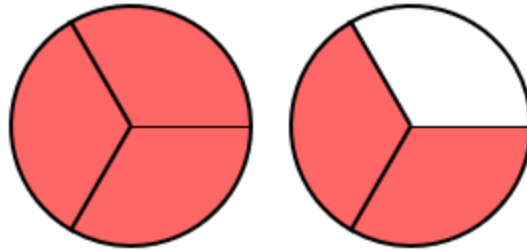
WHOLE OR MIXED FORM

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

TO FRACTION FORM

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

Mixed Form To Fraction Form 1



WHOLE OR MIXED FORM

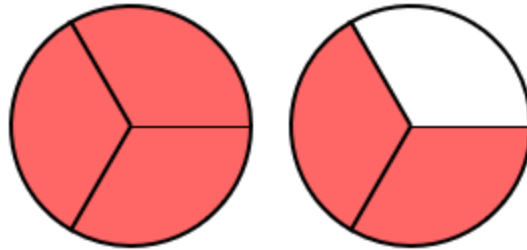
$$1 \frac{2}{3}$$

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*.

Mixed Form To Fraction Form 2



WHOLE OR MIXED FORM

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

=

$$\frac{1 \times 3 + 2}{3}$$

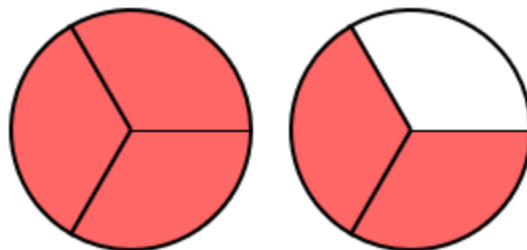
=

$$\frac{5}{3}$$

TO FRACTION FORM

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*.

Mixed Form To Fraction Form 3



WHOLE OR MIXED FORM

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

=

$$\frac{1 \times 3 + 2}{3}$$

TO FRACTION FORM

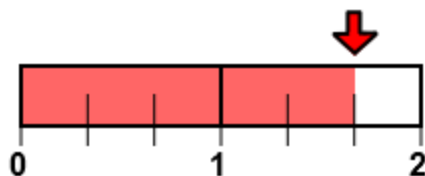
$$= \frac{5}{3}$$

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 $\frac{5}{3}$.

Mixed Form To Fraction Form 4



WHOLE OR MIXED FORM

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

=

$$\frac{1 \times 3 + 2}{3}$$

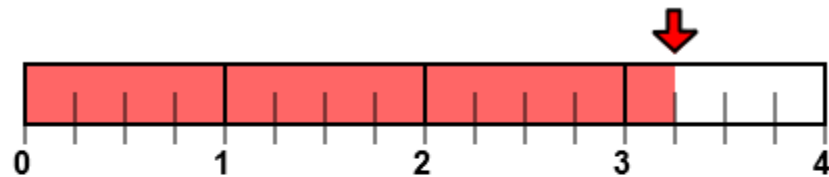
TO FRACTION FORM

=

$$\frac{5}{3}$$

The same amount, $1 \frac{2}{3}$, is shown with a number line.

Mixed Form To Fraction Form 5



WHOLE OR MIXED FORM

$$3 \frac{1}{4}$$

=

$$\frac{3 \times 4 + 1}{4}$$

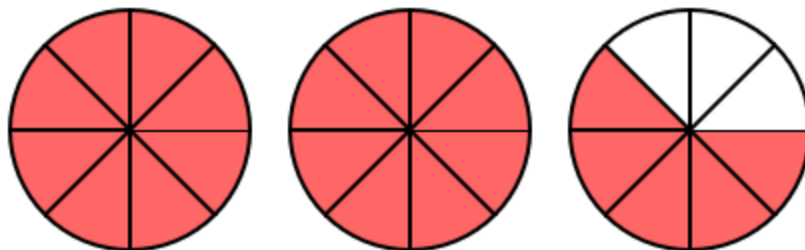
TO FRACTION FORM

=

$$\frac{13}{4}$$

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.

Mixed Form To Fraction Form 6



WHOLE OR MIXED FORM

$$2 \frac{5}{8}$$

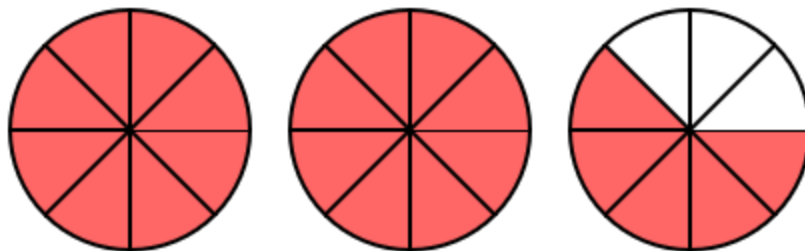
TO FRACTION FORM

$$= \frac{21}{8}$$

Multiply the whole number 2 by the denominator 8.
Then add the numerator 5 for the fraction numerator 21.

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 $\frac{21}{8}$.

Mixed Form To Fraction Form 7



WHOLE OR MIXED FORM

$$2 \frac{5}{8}$$

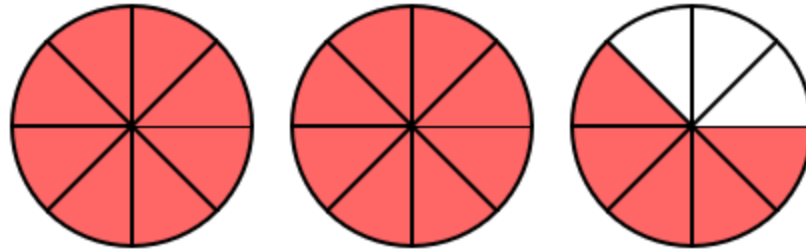
TO FRACTION FORM

$$= \frac{21}{8}$$

Multiply the whole number 2 by the denominator 8.
Then add the numerator 5 for the fraction numerator 21.

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.

Mixed Form To Fraction Form 8



WHOLE OR MIXED FORM

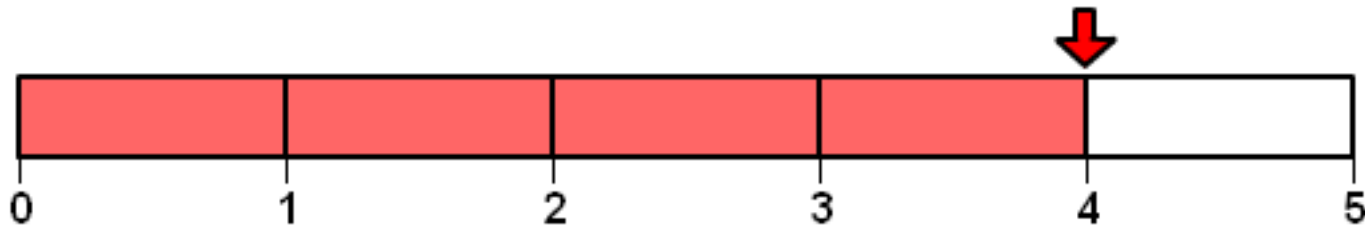
TO FRACTION FORM

$$2 \frac{5}{8} = \frac{2 \times 8 + 5}{8} = \frac{21}{8}$$

Multiply the whole number 2 by the denominator 8.
Then add the numerator 5 for the fraction numerator 21.

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*.

Mixed Form To Fraction Form 9



Whole Number Form to Fraction Form.

$$4 = \frac{4 \times 1 + 0}{1} = \frac{4}{1}$$

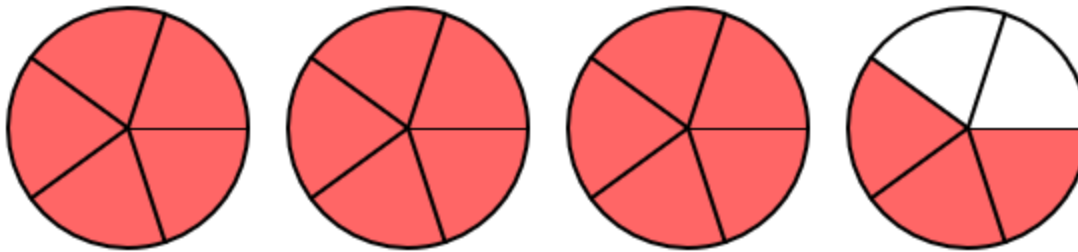
To write the whole number 4 in *fraction form* simply write the whole number 4 over the denominator 1.

Mixed Form To Fraction Form 10

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

What is in $3 \frac{3}{5}$ fraction form?

Mixed Form To Fraction Form 11



WHOLE OR MIXED FORM

TO FRACTION FORM

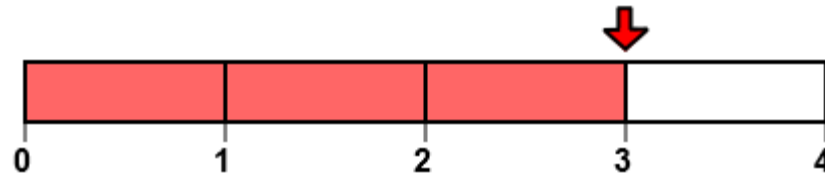
$$3 \frac{3}{5} = \frac{3 \times 5 + 3}{5} = \frac{18}{5}$$

Multiply the whole number 3 by the denominator 5.
Then add the numerator 3 for the fraction numerator 18.

Mixed Form To Fraction Form 12

What is in 3 fraction form?

Mixed Form To Fraction Form 13



WHOLE OR MIXED FORM

$$3 \frac{0}{1}$$

=

$$\frac{3 \times 1 + 0}{1}$$

=

$$\frac{3}{1}$$

TO FRACTION FORM

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