

LESSON
6

Number Theory and Fractions

Review for Mastery: Mixed Numbers and Improper Fractions

A proper fraction is a fraction whose numerator is less than its denominator.

$\frac{2}{3}$, $\frac{1}{4}$, and $\frac{2}{7}$ are examples of proper fractions.

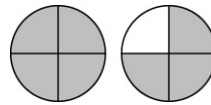
An improper fraction is a fraction whose numerator is greater than or equal to its denominator.

$\frac{3}{2}$, $\frac{8}{3}$, and $\frac{5}{5}$ are examples of improper fractions.

Some improper fractions can be written as mixed numbers.

To write $\frac{7}{4}$ as a mixed number, draw circles divided into $\frac{1}{4}$ sections.

Then shade in 7 of the $\frac{1}{4}$ sections.



There is one circle and $\frac{3}{4}$ of a circle shaded.

So, $\frac{7}{4} = 1\frac{3}{4}$.

Write each improper fraction as a mixed number.

1. $\frac{14}{3}$

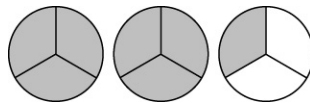
2. $\frac{11}{2}$

3. $\frac{15}{4}$

4. $\frac{19}{6}$

Mixed numbers can be written as improper fractions.

To write $2\frac{1}{3}$ as an improper fraction, draw 3 circles. Divide each circle into $\frac{1}{3}$ sections. Next, shade in 2 whole circles and one $\frac{1}{3}$ section of the last circle.



Then find the total number of $\frac{1}{3}$ sections that are shaded.

Seven $\frac{1}{3}$ sections are shaded, so $2\frac{1}{3} = \frac{7}{3}$.

Write each mixed number as an improper fraction.

5. $3\frac{1}{4}$

6. $5\frac{2}{3}$

7. $4\frac{1}{2}$

8. $1\frac{5}{6}$
