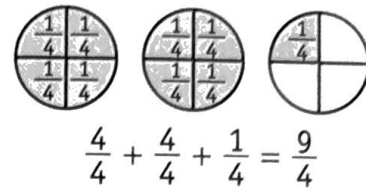


Changing Mixed Numbers to Improper Fractions

An important skill in multiplication and division of fractions is changing a mixed number, such as $2\frac{1}{4}$, to an improper fraction. You know that one whole equals $\frac{4}{4}$ and that 2 equals $\frac{8}{4}$. Adding the extra $\frac{1}{4}$, you get $\frac{9}{4}$.



Study the next examples to see how to change mixed numbers to improper fractions.

EXAMPLE 1 Change $2\frac{1}{4}$ to an improper fraction.

STEP 1 Multiply the denominator, 4, by the whole number, 2. $4 \times 2 = 8$

STEP 2 Add the numerator, 1, to 8. $8 + 1 = 9$

STEP 3 Write the total, 9, over the denominator, 4. $2\frac{1}{4} = \frac{9}{4}$

EXAMPLE 2 Change $5\frac{2}{3}$ to an improper fraction.

STEP 1 Multiply the denominator, 3, by the whole number, 5. $3 \times 5 = 15$

STEP 2 Add the numerator, 2, to 15. $15 + 2 = 17$

STEP 3 Write the total, 17, over the denominator, 3. $5\frac{2}{3} = \frac{17}{3}$

Change each mixed number to an improper fraction.

1. $2\frac{3}{4} =$ $1\frac{4}{7} =$ $5\frac{1}{3} =$ $6\frac{2}{7} =$ $4\frac{3}{5} =$

2. $9\frac{1}{2} =$ $7\frac{5}{8} =$ $2\frac{9}{10} =$ $8\frac{3}{4} =$ $3\frac{5}{9} =$

3. $10\frac{1}{3} =$ $11\frac{2}{5} =$ $4\frac{5}{12} =$ $6\frac{7}{8} =$ $12\frac{1}{4} =$

4. $3\frac{4}{5} =$ $6\frac{1}{7} =$ $9\frac{3}{8} =$ $2\frac{1}{12} =$ $5\frac{4}{15} =$