

Products of Mixed Numbers - Guided Lesson Explanation

Explanation#1

Write the whole number as a fraction.

$$\frac{12}{1} \times \frac{6}{2}$$

We will cancel common factors, and then multiply.

$$\frac{12}{1} \times \frac{6}{2} = \frac{6}{1} \times \frac{6}{1} = \frac{36}{1}$$

So the answer is 36.

Explanation#2

The multiplicative inverse of a fraction can be found by switching the numerator and the denominator. Take the reciprocal of the number:

$$\frac{3}{7} \rightarrow \frac{7}{3}$$

Explanation#3

positive \times negative = negative

To multiply two fractions, multiply the numerators and multiply the denominators.

Write mixed numbers as improper fractions.

$$-3\frac{6}{2} \times 4\frac{1}{4} = \frac{-12}{2} \times \frac{17}{4} =$$

Simplify the answer

$$\frac{-12}{2} \times \frac{17}{4} = \frac{-3}{2} \times \frac{17}{1}$$

$$\frac{-51}{2}$$

