

Chapter 4 Rational Numbers

Lesson 4-5 Add and Subtract Mixed Numbers

Page 303

5 Find $11\frac{3}{4} - 4\frac{1}{3}$.

Rename using the LCD of 4 and 3, 12.

$$\begin{aligned} 11\frac{3}{4} - 4\frac{1}{3} &= 11\frac{9}{12} - 4\frac{4}{12} \\ &= 7\frac{5}{12} \end{aligned}$$

Rename each fraction.

Subtract the whole numbers and then the fractions.

11 The length of Kasey's garden is $4\frac{5}{8}$ feet. Find the width of Kasey's garden if it is $2\frac{7}{8}$ feet shorter than the length.

Because the width is shorter than the length, subtract. Since $\frac{5}{8}$ is less than $\frac{7}{8}$, rename $4\frac{5}{8}$ as $3\frac{13}{8}$ before subtracting.

$$\begin{aligned} 4\frac{5}{8} - 2\frac{7}{8} &= 3\frac{13}{8} - 2\frac{7}{8} \\ &= 1\frac{6}{8} \text{ or } 1\frac{3}{4} \end{aligned}$$

Rename each fraction.

Subtract the whole numbers and then the fractions.

So, the garden is $1\frac{3}{4}$ feet wide.