Comparing and Ordering Decimals

**Why?**
Ordered lists of decimals are frequently found in sports statistics, such as batting averages in baseball.

\[ 121.0345 < 121.0543 \]

To order numbers, you can compare them using **place value**.

Numbers are **ordered** from least to greatest on the number line from left to right.

Estimating Decimals

**Why?**
You can use estimation to determine whether results of decimal operations are reasonable.

Estimate \( 3.56 + 8.31 \) to the nearest whole number.

\[ 4 + 8 = 12 \quad \text{The sum is about 12.} \]

Estimate \( 9.7 \div 3.5 \).

\[ 9 \div 3 = 3 \quad \text{The quotient is about 3.} \]

Adding and Subtracting Decimals

**Why?**
Using a checkbook requires adding and subtracting decimals.

Add \( 5 + 10.25 + 3.5 \).

\[
\begin{align*}
5.00 \\
10.25 \\
+ 3.50 \\
28.75
\end{align*}
\]

Subtract 3.57 from 9.

\[
\begin{align*}
9.00 \\
- 3.57 \\
5.43
\end{align*}
\]

**Use of zeros to write an equivalent number to the same number of decimal places as the other numbers.**

**Align the decimal points.**