Division with Remainders

Example 1

Complete the following equation: 243 ÷ 5 =

Explanation

Step 1: Divide the hundreds.

$5\overline{)243}$

Since 2 < 5, move to Step 2.

Step 2: Divide the tens.

$$\begin{array}{r} 4 \\ 5\overline{)243} \\ -\,20 \\ \hline 4 \end{array}$$

24 ÷ 5

24 – 20

Step 3: Divide the ones.

$$\begin{array}{r} 48 \\ 5\overline{)243} \\ -\,20\downarrow \\ \hline 43 \\ -\,40 \\ \hline 3 \end{array}$$

Bring down the ones.

43 ÷ 5

43 – 40

So, 243 ÷ 5 is 48 R3.

Example 2

Complete the following equation: 542 ÷ 5 =

Explanation

Step 1: Divide the hundreds.

$$\begin{array}{r} 1 \\ 5\overline{)542} \\ -\,5 \\ \hline \end{array}$$

5 ÷ 5

5 – 5

Step 2: Divide the tens.

$$\begin{array}{r} 10 \\ 5\overline{)542} \\ -\,5\downarrow \\ \hline 4 \end{array}$$

Bring down the tens.

4 ÷ 5

Since 4 < 5, move to Step 3.

Step 3: Divide the ones.

$$
\begin{array}{r}
108 \\
5\overline{)542} \\
-\ 5\downarrow \\
\hline
42 \\
-\ 40 \\
\hline
2
\end{array}
$$

Bring down the ones.

42 ÷ 5

42 – 40

So, 542 ÷ 5 is 108 R2.