

## Using Paper and Pencil

### Example 1

$$21 \overline{)462}$$

#### Explanation

Step 1: Divide the tens.

$$\begin{array}{r} 2 \\ 21 \overline{)462} \\ \underline{-42} \\ 4 \end{array}$$

Divide:  $46 \div 21$

Subtract:  $46 - 42$

Step 2: Divide the ones.

$$\begin{array}{r} 22 \\ 21 \overline{)462} \\ \underline{-42} \\ 42 \\ \underline{-42} \\ 0 \end{array}$$

Bring down the ones.

Divide:  $42 \div 21$

Subtract:  $42 - 42$

So,  $21 \overline{)462} = 22$ .

### Example 2

$$31 \overline{)279}$$

#### Explanation

Step 1: Divide the tens.

$$31 \overline{)279}$$

Since  $27 < 31$ , move to Step 2.

Step 2: Divide the ones.

$$\begin{array}{r} 9 \\ 31 \overline{)279} \\ \underline{-279} \\ 0 \end{array}$$

Divide:  $279 \div 31$

Subtract:  $279 - 279$

So,  $31 \overline{)279} = 9$ .

### Example 3

$$456 \div 26$$

#### Explanation

Step 1: Divide the tens.

$$\begin{array}{r} 1 \\ 26 \overline{)456} \\ \underline{-26} \\ 19 \end{array}$$

$45 \div 26$

$45 - 26$

Step 2: Divide the ones.

$$\begin{array}{r} 17 \\ 26 \overline{)456} \\ \underline{-26} \\ 196 \\ \underline{-182} \\ 14 \end{array}$$

Bring down the ones.

$196 \div 26$

$196 - 182$

So,  $456 \div 26$  is 17 R14.

### Example 4

$$2506 \div 16$$

#### Explanation

Step 1: Divide the hundreds.

$$\begin{array}{r} 1 \\ 16 \overline{)2506} \\ \underline{-16} \\ 9 \end{array}$$

$25 \div 16$

$25 - 16$

Step 2: Divide the tens.

$$\begin{array}{r} 15 \\ 16 \overline{)2506} \\ \underline{-16} \\ 90 \\ \underline{-80} \\ 10 \end{array}$$

Bring down the tens.

$90 \div 16$

$90 - 80$

Step 3: Divide the ones.

$$\begin{array}{r} 156 \\ 16 \overline{)2506} \\ \underline{-16} \\ 90 \\ \underline{-80} \\ 106 \\ \underline{-96} \\ 10 \end{array}$$

Bring down the ones.

$106 \div 16$

$106 - 96$

So,  $2506 \div 16$  is 156 R10.