

Partial Quotients with Two-Digit Divisors

The **partial quotients method** is a way to solve division problems by repeatedly finding pieces of the quotient, or a partial quotient, subtracting the products from the dividend, and then adding up all the quotients to determine the answer to the division problem.

Label the products, partial quotients, dividend, and divisor in this example problem.

$$\begin{array}{r}
 \overset{x}{17} \overline{) 589} \\
 \underline{-170} \quad 10 \\
 419 \\
 \underline{-170} \quad 10 \\
 249 \\
 \underline{-170} \quad 10 \\
 79 \\
 \underline{-68} \quad 4 \\
 11
 \end{array}$$

$\overset{x}{17} \overline{) 589} \quad 10$

$\underline{34} \quad \text{Remainder of 11}$

$$589 \div 17 = 34 \text{ R}11$$

Directions: Solve the division problems using the partial quotients method.

1.

$$896 \div 23$$

2.

$$5,435 \div 58$$