

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.

589 ÷ 17 = 34 R11

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

1. $896 \div 23$

$$\begin{array}{r}
 23 \overline{) 896} \\
 \underline{-230} \quad 10 \\
 666 \\
 \underline{-230} \quad 10 \\
 436 \\
 \underline{230} \quad 10 \\
 206 \\
 \underline{-92} \quad 4 \\
 114 \\
 \underline{-92} \quad +4 \\
 22 \quad 38
 \end{array}$$

rounded
divisor
↓
 $25 \times 4 = 100$
 $23 \times 4 = 92$

38 Remainder of 22

2. $5,435 \div 58$

$$\begin{array}{r}
 58 \overline{) 5435} \\
 \underline{-580} \quad 10 \\
 4855 \\
 \underline{-580} \quad 10 \\
 4275 \\
 \underline{580} \quad 10 \\
 3695 \\
 \underline{-1160} \quad 20 \\
 2535 \\
 \underline{-1160} \quad 20 \\
 1375 \\
 \underline{-1160} \quad 20 \\
 215 \\
 \underline{-174} \quad 3 \\
 41 \quad 93
 \end{array}$$

rounded
divisor
↓
 $60 \times 4 = 240$
 $60 \times 3 = 180$
 $58 \times 3 = 174$

93 Remainder of 41