

Partial Quotients Division

Example

divisor → 3

dividend → 58

multipliers → 10, 9

remainder → 1

19r1

3 × 10 = 30

3 × 9 = 27

10 + 9 = 19

Find an easy multiple of the divisor and subtract from the dividend. Repeat until the number is less than the divisor or you reach zero.

Add up the multipliers of the divisor to find the answer.

Solve using partial quotients.

a.

$$5 \overline{) 78}$$

b.

$$4 \overline{) 93}$$

c.

$$6 \overline{) 86}$$

d.

$$3 \overline{) 64}$$

e.

$$2 \overline{) 71}$$

f.

$$7 \overline{) 99}$$

g.

$$4 \overline{) 75}$$

Partial Quotients Division

Work will vary.

Solve using partial quotients.

a.

$$\begin{array}{r}
 15r3 \\
 5 \overline{) 78} \\
 \underline{-50} \quad 5 \times 10 \\
 28 \\
 \underline{-25} \quad 5 \times 5 \\
 3 \quad 10 + 5 = 15
 \end{array}$$

b.

$$\begin{array}{r}
 23r1 \\
 4 \overline{) 93} \\
 \underline{-80} \quad 4 \times 20 \\
 13 \\
 \underline{-12} \quad 4 \times 3 \\
 1 \quad 20 + 3 = 23
 \end{array}$$

c.

$$\begin{array}{r}
 14r2 \\
 6 \overline{) 86} \\
 \underline{-60} \quad 6 \times 10 \\
 26 \\
 \underline{-24} \quad 6 \times 4 \\
 2 \quad 10 + 4 = 14
 \end{array}$$

d.

$$\begin{array}{r}
 21r1 \\
 3 \overline{) 64} \\
 \underline{-60} \quad 3 \times 20 \\
 4 \\
 \underline{-3} \quad 3 \times 1 \\
 1 \quad 20 + 1 = 21
 \end{array}$$

e.

$$\begin{array}{r}
 35r1 \\
 2 \overline{) 71} \\
 \underline{-60} \quad 2 \times 30 \\
 11 \\
 \underline{-10} \quad 2 \times 5 \\
 1 \quad 30 + 5 = 35
 \end{array}$$

f.

$$\begin{array}{r}
 14r1 \\
 7 \overline{) 99} \\
 \underline{-70} \quad 7 \times 10 \\
 29 \\
 \underline{-28} \quad 7 \times 4 \\
 1 \quad 10 + 4 = 14
 \end{array}$$

g.

$$\begin{array}{r}
 18r3 \\
 4 \overline{) 75} \\
 \underline{-40} \quad 4 \times 10 \\
 35 \\
 \underline{-32} \quad 4 \times 8 \\
 3 \quad 10 + 8 = 18
 \end{array}$$