Name: _____

Partial Quotients Division

Example

19 r 1

divisor ⟶ 3 | 58   multipliers

dividend

-30   3 × 10

28

-27   3 × 9   10 + 9 = 19

1

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.

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

Solve using partial quotients.

a.

5 | 78

b.

4 | 93

c.

6 | 86

d.

3 | 64

e.

2 | 71

f.

7 | 99

g.

4 | 75

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Partial Quotients Division

Work will vary.

Solve using partial quotients.

a.

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

b.

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

c.

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

d.

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

e.

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

f.

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

g.

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