

Lesson 14: Practice an Algorithm Using Partial Quotients

- Let's practice using an algorithm using partial quotients.

Warm-up: Which One Doesn't Belong: Different Ways

Which one doesn't belong?

A

$$\begin{array}{r} \boxed{16} \\ 82 \overline{)1,312} \end{array}$$

B

$$\begin{array}{r} \boxed{16} \\ 1 \\ 5 \\ 5 \\ 5 \\ 82 \overline{)1,312} \end{array}$$

C

$$\begin{array}{r} 1 \\ 5 \\ 10 \\ 82 \overline{)1,312} \end{array}$$

D

$$\begin{array}{r} \boxed{16} \\ 10 \\ 5 \\ 1 \\ 82 \overline{)1,312} \end{array}$$

14.1: Find the Mistake

For each problem, describe where you see an error in the calculation. Then find the correct whole number quotient.

1.

$$\begin{array}{r}
 \boxed{29} \\
 4 \\
 5 \\
 20 \\
 46 \overline{)1,656} \\
 \underline{-920} \\
 436 \\
 \underline{-230} \\
 206 \\
 \underline{-184} \\
 22
 \end{array}$$

2.

$$\begin{array}{r}
 \boxed{64} \\
 4 \\
 60 \\
 18 \overline{)972} \\
 \underline{-900} \\
 72 \\
 \underline{-72} \\
 0
 \end{array}$$

3.

$$\begin{array}{r}
 \boxed{211} \\
 1 \\
 10 \\
 200 \\
 24 \overline{)744} \\
 \underline{-480} \\
 264 \\
 \underline{-240} \\
 24
 \end{array}$$

14.2: Practice Problems

Find the value of each expression. Then check in with a partner to review your work.

1.

$$16 \overline{)768}$$

2.

$$29 \overline{)1,305}$$

3.

$$21 \overline{)8,715}$$

4.

$$53 \overline{)6,572}$$