Unit 4, Lesson 13

Practice a Partial-Quotients Algorithm

Let's practice using a partial-quotients algorithm.

Warm-up

Which Three Go Together: Different Ways

Which 3 go together?

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

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

Activity 1

Find the Mistake

Describe the error(s) in each problem. Then find the correct whole-number quotient.

1.

```
   29
    4
    5
   20
46 )1,656
  −920
   436
  −230
   206
  −184
    22
```

2.

```
   64
    4
   60
18 )972
  −900
    72
  − 72
     0
```

3.

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

Activity 2

Practice Problems

Find the value of each expression. Then have a partner review your work.

1.

$16\overline{)768}$

2.

$29\overline{)1,319}$

3.

$21\overline{)8,721}$

4.

$53\overline{)6,572}$