

#### **Grade 5 Unit 4**

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# **Unit 4 Lesson 12: An Algorithm Using Partial Quotients**

## **WU Notice and Wonder: Incomplete Solution (Warm up)**

### Student Task Statement

What do you notice? What do you wonder?

$$\begin{array}{r}
20 \\
16 \overline{\smash{\big)}448} \\
-320 \\
128
\end{array}$$
(20 × 16)
(5 × 16)

## 1 Elena's Work

### Student Task Statement

- 1. Find the value of  $448 \div 16$ . Show your thinking. Organize it so it can be followed by others. (Pause for teacher directions.)
- 2. This is Elena's work. Describe the steps Elena took to find the value of  $448 \div 16$ .

$$\begin{array}{r}
 28 \\
 3 \\
 5 \\
 20 \\
 16)\overline{448} \\
 -320 \\
 128 \\
 -80 \\
 \hline
 48 \\
 -48 \\
 \hline
 0 \\
 \hline
 320 \\
 \hline
 (20 \times 16) \\
 \hline
 48 \\
 \hline
 -48 \\
 \hline
 0 \\
 \hline
 (3 \times 16) \\
 \hline
 \end{array}$$

# 2 Complete the Solution

## Student Task Statement

Use Elena's strategy to complete the following problems:

1.

$$\begin{array}{c}
20 \\
20 \\
12)492 \\
-240 \\
252 \\
-240 \\
(20 \times 12)
\end{array}$$

2.

3.