



What's the Quotient?

Let's find some quotients of multi-digit numbers.

Warm-up

Number Talk: Divide by 3

Find the value of each expression mentally.

- $48 \div 3$
- $480 \div 3$
- $528 \div 3$
- $5,280 \div 3$



Activity 1

Unfinished Divisions

Here are 4 calculations to find the value of $7,465 \div 5$, but each calculation is unfinished.

Complete at least 2 of the unfinished calculations.

$$\begin{array}{r} 200 \\ 80 \\ 13 \\ 5 \overline{)7,465} \\ - \quad 65 \\ \hline 7,400 \\ - \quad 400 \\ \hline 7,000 \\ - \quad 1,000 \\ \hline \end{array}$$

$$\begin{array}{r} 400 \\ 1,000 \\ 5 \overline{)7,465} \\ - \quad 5,000 \\ \hline 2,465 \\ - \quad 2,000 \\ \hline \end{array}$$

$$\begin{array}{l} 5,000 \div 5 = 1,000 \\ 60 \div 5 = 12 \\ 5 \div 5 = 1 \end{array}$$

7,465 is a little less than 7,500.

$$\begin{array}{l} 7,500 \div 5 = 1,500 \\ 35 \div 5 = 7 \end{array}$$



Activity 2

Where Do We Begin?

1. Jada and Noah are finding the value of $3,681 \div 9$. Jada says to start by dividing 81 by 9. Noah says to start by dividing 3,600 by 9.
 - a. Explain why each suggestion is helpful for finding the quotient.

- b. Find the value of $3,681 \div 9$. Show your reasoning.



2. Find the unknown numbers to show a correct division calculation.

$$\begin{array}{r}
 \boxed{703} \\
 3 \\
 100 \\
 \boxed{} \\
 \boxed{} \\
 6 \overline{) 4,218} \\
 - 3,000 \\
 \hline
 1,218 \\
 - 600 \\
 \hline
 618 \\
 \boxed{} \\
 \hline
 18 \\
 \boxed{} \\
 \hline
 0
 \end{array}$$

$$\begin{array}{r}
 \boxed{} \\
 4 \\
 10 \\
 \boxed{} \\
 \boxed{} \\
 4 \overline{) } \\
 - 400 \\
 \hline
 \boxed{} \\
 - 100 \\
 \hline
 \boxed{} \\
 - 40 \\
 \hline
 16 \\
 - 16 \\
 \hline
 0
 \end{array}$$

$$\begin{array}{r}
 \boxed{} \\
 6 \\
 70 \\
 \boxed{} \\
 \boxed{} \\
 7 \overline{) } \\
 - 700 \\
 \hline
 \boxed{} \\
 - 700 \\
 \hline
 \boxed{} \\
 - 490 \\
 \hline
 42 \\
 - 42 \\
 \hline
 0
 \end{array}$$

3. Consider the expression $5,016 \div 8$.

a. What would you do to start finding the value of the quotient?

b. Show how you would find the value with as few steps as possible.