

Grade 4 Unit 9

Lesson 6

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Unit 9 Lesson 6: What's the Quotient?

WU Number Talk: Divide by 3 and by 6 (Warm up)

Student Task Statement

Find the value of each expression mentally.

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

1 Unfinished Divisions

Student Task Statement

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

Complete at least two of the unfinished calculations. Be prepared to explain how you know what to do to complete the work.

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

 \end{array}$$

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

$$\begin{array}{r}
 400 \\
 1,000 \\
 5 \overline{)7,465} \\
 \underline{5,000} \\
 2,465 \\
 \underline{2,000} \\

 \end{array}$$

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

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

2 Where Do We Begin?

Student Task Statement

- Jada and Noah are finding the value of $3,681 \div 9$. Jada says to start by dividing 81 by 9. Noah says start by dividing 3,600 by 9.
 - Explain why each suggestion is helpful for finding the quotient.
 - Find the value of $3,681 \div 9$. Show your reasoning.
- Find the missing numbers such that each calculation shows a correct division calculation.

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

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

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

- Consider the expression $5,016 \div 8$.
 - What would you do to start finding the value of the quotient?
 - Show how you would find the value with as few steps as possible.