Unit 3 Lesson 1: Size of Divisor and Size of Quotient

1 Number Talk: Size of Dividend and Divisor (Warm up)

Student Task Statement

Find the value of each expression mentally.

$5,000 \div 5$

$5,000 \div 2,500$

$5,000 \div 10,000$

$5,000 \div 500,000$

2 All Stacked Up

Student Task Statement

1. Here are several types of objects. For each type of object, estimate how many are in a stack that is 5 feet high. Be prepared to explain your reasoning.

Cardboard boxes

Notebooks

Bricks

Coins

2. A stack of books is 72 inches tall. Each book is 2 inches thick. Which expression tells us how many books are in the stack? Be prepared to explain your reasoning.

   ○ $72 \cdot 2$ ○ $72 - 2$ ○ $2 \div 72$ ○ $72 \div 2$

3. Another stack of books is 43 inches tall. Each book is $\frac{1}{2}$-inch thick. Write an expression that represents the number of books in the stack.

3 All in Order

Student Task Statement

Your teacher will give you two sets of papers with division expressions.

1. Without computing, estimate the quotients in each set and order them from greatest to least. Be prepared to explain your reasoning.

   Pause here for a class discussion.

   Record the expressions in each set in order from the greatest value to the least.

   a. Set 1

   b. Set 2

2. Without computing, estimate the quotients and sort them into the following three groups. Be prepared to explain your reasoning.

   $30 \div \frac{1}{2}$ $9 \div 10$ $18 \div 19$ $15{,}000 \div 1{,}500{,}000$

   $30 \div 0.45$ $9 \div 10{,}000$ $18 \div 0.18$ $15{,}000 \div 14{,}500$

   ○ Close to 0   ○ Close to 1   ○ Much larger than 1