Unit 4, Lesson 16

Fractions as Partial Quotients

Let's use fractions to help us divide whole numbers.

Warm-up

What Do You Know about $\frac{60}{6} + \frac{6}{6}$?

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Activity 1

Select Expressions

1. Select **all** expressions that have the same value as $\frac{78}{6}$. Explain or show your reasoning.

   A. $78 \div 6$

   B. $\frac{66}{6} + \frac{12}{6}$

   C. $\frac{60}{6} + \frac{18}{6}$

   D. $(60 \div 6) + (18 \div 6)$

   E. $\frac{77}{6} + \frac{8}{6}$

   F. $(60 \div 6) + 18$

2. What is the value of $78 \div 6$? Show your thinking. Organize your work so it can be followed by others.

Activity 2

Choose One Expression

1. Use each expression to find the value of $165 \div 15$. Show your thinking. Organize your work so it can be followed by others.

   a. $\frac{75}{15} + \frac{80}{15} + \frac{10}{15}$

   b. $\frac{30}{15} + \frac{30}{15} + \frac{30}{15} + \frac{60}{15} + \frac{15}{15}$

   c. $\frac{150}{15} + \frac{15}{15}$

2. Choose one of these expressions to find the value of $540 \div 18$. Show your thinking. Organize your work so it can be followed by others.

   a. $\frac{180}{18} + \frac{180}{18} + \frac{180}{18}$

   b. $\frac{500}{18} + \frac{40}{18}$

   c. $\frac{360}{18} + \frac{180}{18}$

3. Which expressions are most helpful? Which expressions are least helpful? Explain or show your reasoning.