

Lesson 18: Divide with Partial Quotients

- Let's analyze and use an algorithm that uses partial quotients.

Warm-up: Number Talk: Divide by 3

Find the value of each expression mentally.

- $90 \div 3$

- $96 \div 3$

- $960 \div 3$

- $954 \div 3$

18.1: Decompose Dividends

- Find the value of $465 \div 5$. Show your reasoning. You may use base-blocks if you find them helpful.

- Here's how Priya finds the value of $465 \div 5$.

$$400 \div 5 = 80$$

$$60 \div 5 = 12$$

$$5 \div 5 = 1$$

$$465 \div 5 = 93$$

- What has Priya done? Describe her steps.

- How is Priya's method similar to your method?

- Use Priya's method to find the value of $428 \div 4$.

18.2: Tyler's Method

Tyler uses a different method to find the value of $465 \div 5$. Let's compare Priya's and Tyler's work.

Priya's method	Tyler's method																												
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1. How are Priya and Tyler's methods alike? How are they different? List as many similarities and differences as you can find.

2. Why do you think Tyler uses subtraction in his method?

3. Show how Tyler might record the process of finding the value of $428 \div 4$.