Unit 4, Lesson 10

Different Partial Quotients

Let's use what we know about multiplication and place value to find quotients.

Warm-up

Notice and Wonder: Ways to Record

What do you notice? What do you wonder?

Clare's strategy

$364 \div 13$

$13 \times 10 = 130$

$13 \times 20 = 260$

$13 \times 5 = 65$

$13 \times 3 = 39$

$364 - 260 = 104$

$104 - 65 = 39$

$39 - 39 = 0$

Jada's strategy

$130 \div 13 = 10$

$130 \div 13 = 10$

$65 \div 13 = 5$

$39 \div 13 = 3$

$364 \div 13 = 28$

Activity 1

Division Expressions

Take turns:

1. Choose a set of expressions that when added together have the same value as $308 \div 14$. Not all expressions will be used.
2. Explain to your partner how you know that your cards represent a sum that has the same value as $308 \div 14$.

   (Pause for teacher directions.)

3. Choose one of the sets of expressions. Use it to find the value of $308 \div 14$.

Activity 2

Choose Your Own Partial Quotients

Choose one of the partial-quotients for each expression. Use this partial quotient to begin finding the value of the quotient.

1. $360 \div 15$
   - $150 \div 15$
   - $300 \div 15$
   - $60 \div 15$

2. $945 \div 45$
   - $45 \div 45$
   - $450 \div 45$
   - $900 \div 45$

3. $992 \div 31$
   - $62 \div 31$
   - $341 \div 31$
   - $310 \div 31$

4. How did you decide which partial quotient to use to begin finding the quotient? Did you change your mind and begin with a different partial quotient? Explain or show your reasoning.