Unit 3, Lesson 10

Concepts of Division

Let's think about the size of quotients.

Warm-up

Number Talk: Same Dividend, Different Divisor

Find the value of each expression mentally.

- $120 \div 12$
- $120 \div 6$
- $120 \div 3$
- $120 \div 2$

Activity 1

Share Beads

Order the situations from greatest to least based on the number of beads each student will get. Be prepared to explain your reasoning.

3 students equally share 42 beads.

14 students equally share 42 beads.

3 students equally share 24 beads.

3 students equally share 45 beads.

7 students equally share 42 beads.

3 students equally share 6 beads.

6 students equally share 42 beads.

Activity 2

Division Patterns

1. Find the value of each expression.
   a. $36 \div 3$
   b. $12 \div 3$
   c. $9 \div 3$
   d. $6 \div 3$
   e. $3 \div 3$
   f. $1 \div 3$
2. What patterns do you notice?

3. Why is the quotient getting smaller?

4. What do you know about this expression: $\frac{1}{3} \div 3$?

5. Draw a diagram to represent $\frac{1}{3} \div 3$.