Unit 5, Lesson 3

Solve Multiplicative Comparison Problems

Let's solve multiplicative comparison problems.

Warm-up

Number Talk: Find the Unknown Factor

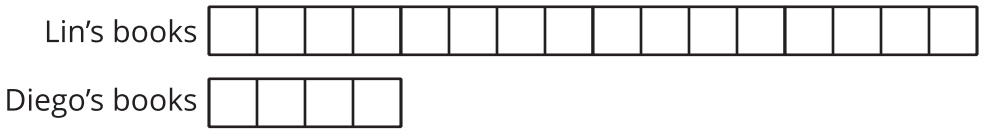
Find the value of each unknown mentally.

- $8 \times ? = 16$
- $3 \times ? = 24$
- $? \times 8 = 32$
- $40 \div 8 = ?$

Activity 1

A Book Drive

This diagram shows the books Lin and Diego donated for the school book drive.



1. Lin donates 16 books. Diego donates 4 books. How many times the number of books as Diego does Lin donate? Explain or show your reasoning. Use the diagram if it is helpful.

2. Priya donates 3 books. Noah donates 21 books. How many times the number of books as Priya does Noah donate? Explain or show your reasoning. Draw a diagram if it is helpful.

3. Mai makes a pile of 27 donated books. Tyler makes his own pile of 3 books. How many times the number of books as Tyler does Mai stack? Explain or show your reasoning.



Activity 2

Represent an Unknown Amount

1. Clare donates 48 books. Clare donates 6 times as many books as Andre.

   a. Draw a diagram to represent the situation.

   b. How many books does Andre donate? Explain your reasoning.

2. Han says he can figure out the number of books Andre donates, using division.

   Tyler says we have to use multiplication because it says “times as many.”

   a. Do you agree with Han or Tyler? Explain your reasoning.

   b. Write an equation to represent Tyler’s thinking.

   c. Write an equation to represent Han’s thinking.

3. Elena donates 9 times as many books as Diego. Elena donates 81 books.

   Use multiplication or division to find the number of books Diego donates.