

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.

- $8 \times ? = 16$

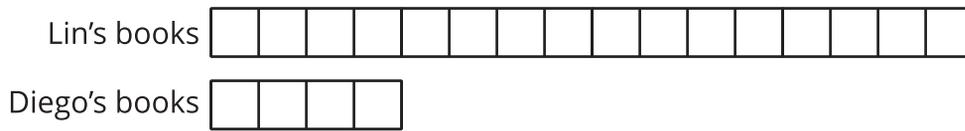
- $3 \times ? = 24$

- $? \times 8 = 32$

- $40 \div 8 = ?$

3.1: A Book Drive

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



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

2. Priya donated 3 books. Noah donated 21 books. How many times as many books did Noah donate as Priya did?

Draw a diagram to show your reasoning.

3. Mai made a pile of 27 donated books. Tyler made his own pile of 3 books. How many times as many books did Mai stack as Tyler did?

Explain or show your reasoning.



3.2: Represent a Missing Amount

1. Clare donated 48 books. Clare donated 6 times as many books as Andre.
 - a. Draw a diagram to represent the situation.

- b. How many books did Andre donate? Explain your reasoning.

2. Han says he can figure out the number of books Andre donated 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 donated 9 times as many books as Diego. Elena donated 81 books.

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