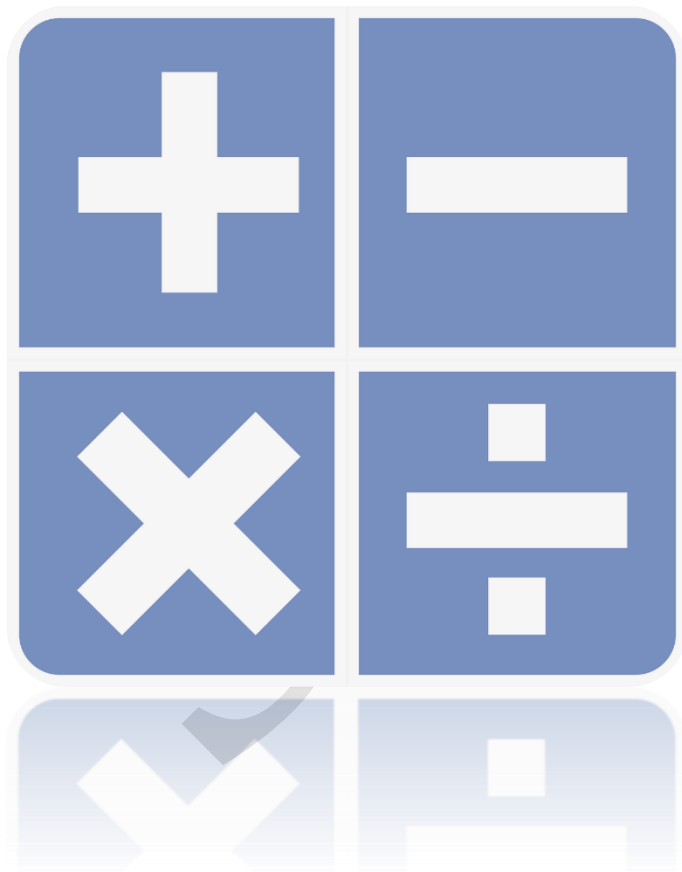


4 Operations of Whole Number

Focus on
Problem
Solving
(P5)



Holiday Programme
(Dec 2025)

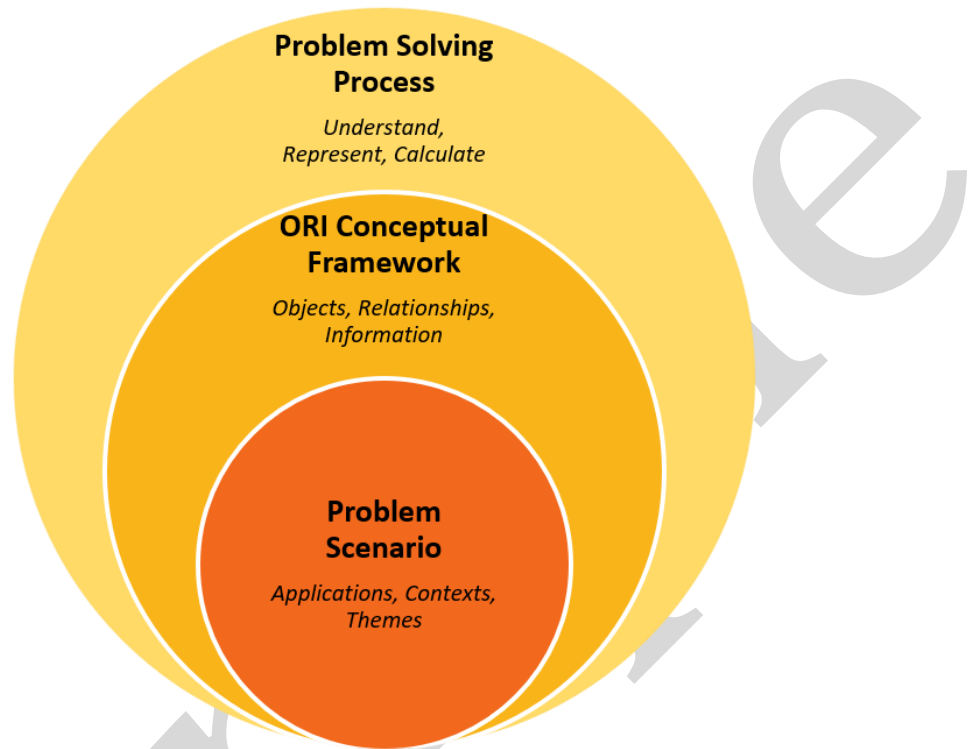
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Relational Concepts Approach (RCA)

The Relational Concepts Approach (RCA) is a structured way of solving mathematical word problems.

It encourages learners to first **understand the underlying relationships** and present them in **clear and concise representations** before carrying out any computations.



Our proprietary **ORI Conceptual Framework** forms the core of the approach.

It guides learners to systematically break down a word problem to identify the mathematical **objects** involved, their **relationships** and the **information** provided.

Multiplications & Divisions

1 Math Essentials

1.1 Order of Operations

Let's Learn

Order of Operations

1

First,
do the calculations in the brackets.

2

Next,
multiply or divide from left to right.

3

Then,
add or subtract from left to right.

Example:

$$14 \times (8 - 5) \div 6 - 2$$

$$= 14 \times 3 \div 6 - 2$$

$$= 42 \div 6 - 2$$

$$= 7 - 2$$

$$= 5$$



2 Problem Solving: Items with Values in Unequal Parts

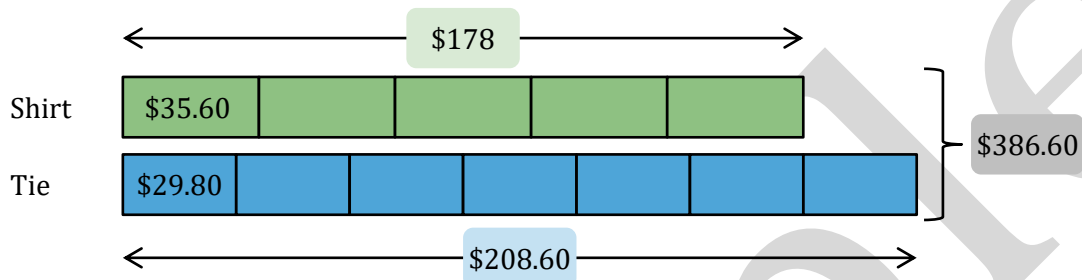
Let's Relate

A shirt cost \$35.60 and a tie cost \$29.80.

John bought 5 shirts and 7 ties.

He spent \$178 on the shirts and \$208.60 on the ties.

- He spent \$386.60 in all.



The ORI Table

Type of Objects:	Items (Numbers)/ with Values/ with Measurements
Parts of Objects:	No Parts/ Unequal Parts/ Equal Parts/ with Subparts
Comparison:	Yes/ No
Changes:	Yes/ No

Type of Questions

Type	Question	Information Given/ Implied						
		Item 1			Item 2			Total
		Quan	Unit Val	Val	Quan	Unit Val	Val	Val
1	A shirt cost \$35.60 and a tie cost \$29.80. John bought 5 shirts and 7 ties. How much did John spend altogether?	✓	✓		✓	✓		
2	A shirt cost \$35.60. John spent \$386.60 on 5 shirts and 7 ties. How much did a tie cost?	✓	✓		✓			✓
3	A shirt cost \$35.60 and a tie cost \$29.80. John spent \$386.60 on 5 shirts and some ties. How many ties did John buy?	✓	✓			✓		✓

2.1 Type 1 Questions

Let's Learn

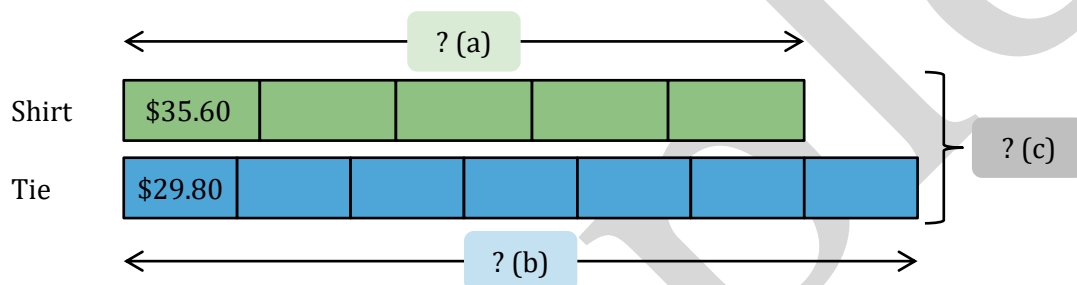
1 A shirt cost \$35.60 and a tie cost \$29.80.

John bought 5 shirts and 7 ties.

(a) How much did John spend on the shirts?

(b) How much did John spend on the ties?

(c) How much did John spend altogether?



(a)

1 Shirt → 35.6

5 Shirts → 35.6 × 5 = 178

He spent \$178 on the shirts.

(b)

1 Tie → 29.8

7 Ties → 29.8 × 7 = 208.6

He spent \$208.60 on the ties.

(c)

178 + 208.6 = 386.6

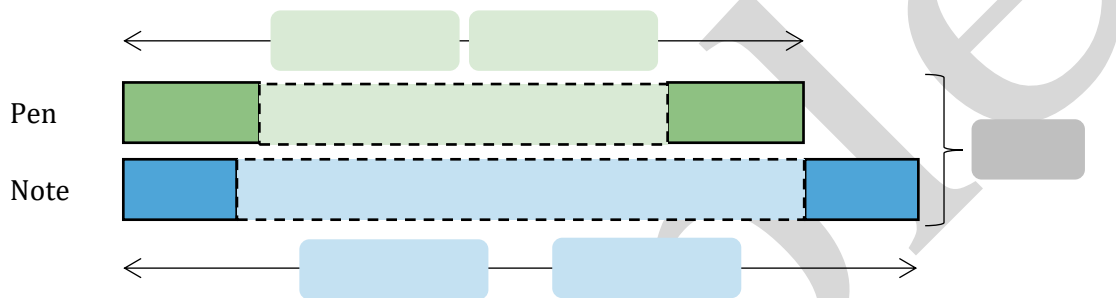
He spent \$386.60 altogether.

Practice 2.1

1 A pen cost \$39.10 and a notebook cost \$15.30.

Jason bought 13 pens and 27 notebooks.

- How much did Jason spend on the pens?
- How much did Jason spend on the notebooks?
- How much did Jason spend altogether?



- → ○ =

He spent on the pens.

- → ○ =

He spent on the notebooks.

- =

He spent altogether.

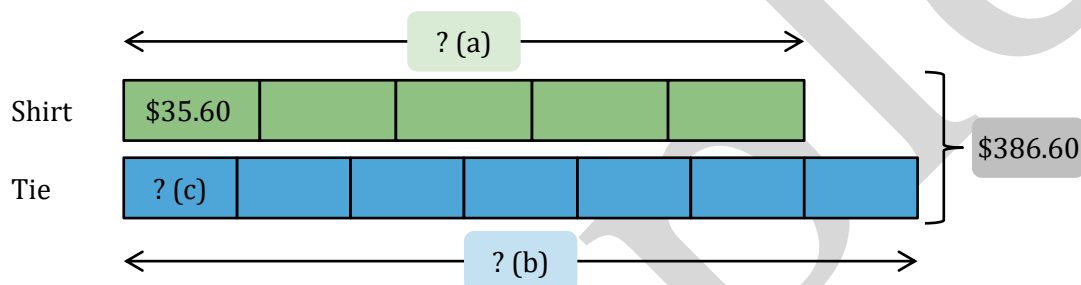
- 2 A speaker cost \$477.60 and a guitar cost \$719.23.
John bought 145 speakers and 213 guitars.
How much did John spend altogether?

- 3 A pot cost \$65.25 and a pan cost \$49.81.
John bought 1152 pots and 3276 pans.
How much did John spend altogether?

2.2 Type 2 Questions

Let's Learn

- 1 A shirt cost \$35.60.
John spent \$386.60 on 5 shirts and 7 ties.
- How much did John spend on the shirts?
 - How much did John spend on the ties?
 - How much did a tie cost?

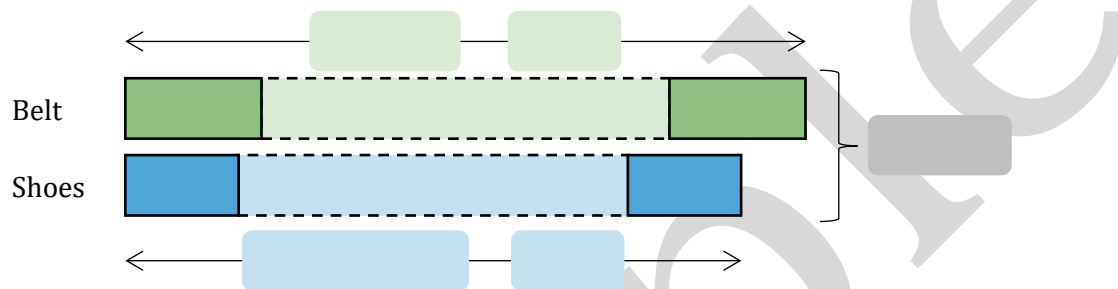


- (a) 1 Shirt $\rightarrow$ 35.6
- 5 Shirts $\rightarrow$ $35.6 \times 5 = 178$
- He spent \$178 on the shirts.
- (b) $386.6 - 178 = 208.6$
- He spent \$208.60 on the ties.
- (c) 7 Ties $\rightarrow$ 208.6
- 1 Tie $\rightarrow$ $208.6 \div 7 = 29.8$
- A tie cost \$29.80 .

Practice 2.2

- 1 A belt cost \$67.15.
Kyle spent \$6895.15 on 79 belts and 31 pairs of shoes.

- (a) How much did Kyle spend on the belts?
(b) How much did Kyle spend on the shoes?
(c) How much did a pair of shoes cost?



- (a) →
 → × =
He spent on the belts.

- (b) × =
He spent on the shoes.

- (c) →
 → ÷ =
A pair of shoes cost .

2 A phone cost \$191.45.

Mason spent \$24 876.85 on 113 phones and 141 earphones.

How much did an earphone cost?

3 A bottle of soda cost \$23.49.

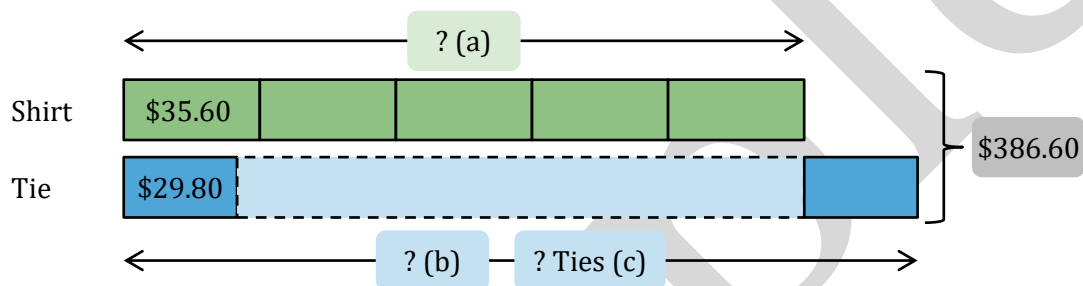
Lina spent \$48 279.88 on 1312 bottles of soda and 919 bottles of milk.

How much did a bottle of milk cost?

2.3 Type 3 Questions

Let's Learn

- 1 A shirt cost \$35.60 and a tie cost \$29.80.
John spent \$386.60 on 5 shirts and some ties.
- (a) How much did John spend on the shirts?
(b) How much did John spend on the ties?
(c) How many ties did John buy?

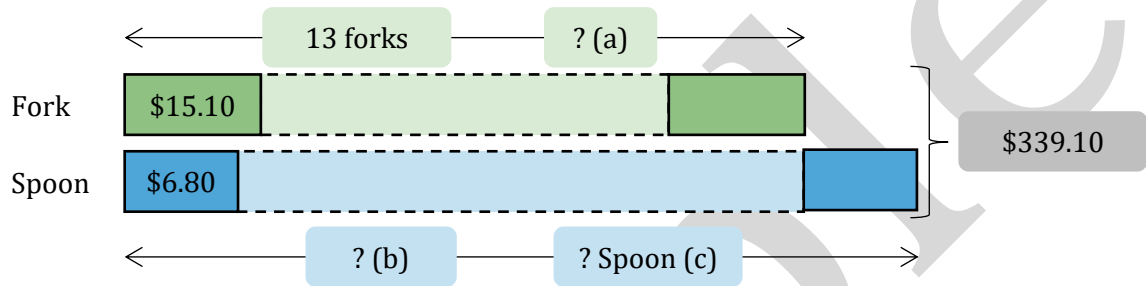


- (a) 1 Shirt $\rightarrow$ 35.6
- 5 Shirts $\rightarrow$ $35.6 \times 5 = 178$
- He spent \$178 on the shirts.
- (b) $386.6 - 178 = 208.6$
- He spent \$208.60 on the ties.
- (c) $208.6 \div 29.8 = 7$
- He bought 7 ties.

Practice 2.3

- 1 A fork cost \$15.10 and a spoon cost \$6.80.
Ben spent \$339.10 on 13 forks and some spoon.

- (a) How much did Ben spend on the forks?
(b) How much did Ben spend on the spoons?
(c) How many spoons did John buy?



- (a) →
 → × =
He spent on the forks.
- (b) × =
He spent on the spoons.
- (c) × =
He bought spoons.

- 2 A pair of jeans cost \$121.32 and a robe cost \$25.00.
John spent \$19 051.04 on 122 jeans and some robes.
How many robes did John buy?

- 3 A ring cost \$62.10 and a bracelet cost \$9.40.
Nina spent \$91 026.10 on 1101 rings and some bracelets.
How many bracelets did Nina buy?