

# Unit Transfer Method

## Primary 5

### Lesson 7: Repeated Identity

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**LESSON 7: REPEATED IDENTITY****DEFINITION**

Usually an object or a person that is repeated in the question.

Let's start with a simple example ...

**Method 1: Model Approach**

**Example:**

Eric bought twice as many sweets as Ray.  
Ray bought 4 times as many sweets as Peter.

**Method 2: Tabulation**

Eric	Ray	Peter

**GUIDED EXAMPLE 1**

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Peter has twice as many paper clips as Mary.

Daniel has thrice as many paper clips as Peter.

Mary has 1560 fewer paper clips than Daniel.

How many paper clips do the three children have altogether?

**GUIDED EXAMPLE 2**

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Hamid has  $\frac{3}{5}$  as many erasers as Devi and  $\frac{2}{3}$  as many erasers as Felicia.

They have a total of 150 erasers. How many erasers does Felicia have?

**GUIDED EXAMPLE 3**

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The ratio of the number of apples to the number of papayas is 2 : 3.

The ratio of the number of papayas to the number of oranges is 2 : 3.

There are a total of 3420 fruits. How many apples are there?

**GUIDED EXAMPLE 4**

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Mandy, Jennifer and Belinda shared a sum of money.

Belinda had 3 times the amount of money that Jennifer had.

The ratio of the amount of money Belinda had to the total amount of money Mandy and Jennifer had was 4 : 5.

Mandy and Belinda had \$299 altogether.

What was the sum of money shared by the three girls?

**GUIDED EXAMPLE 5**

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Veronica, Leroy and Titus each donated some money to charity.

The amount of money Veronica donated was  $\frac{1}{2}$  the total amount of money donated by Leroy and Titus. The amount of money Leroy donated was  $\frac{1}{3}$  the total amount of money donated by Veronica and Titus. If Veronica donated \$168, how much did Leroy donate?

**GUIDED EXAMPLE 6**

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A sum of money raised in a show was distributed to Charities A, B and C.

Charity A received  $\frac{1}{3}$  of the total amount Charities B and C received.

Charity C received  $\frac{1}{4}$  of the total amount Charities A and B received.

- a) What fraction of the total amount of money did Charity B receive?
- b) Charity B received \$88000. How much money was raised in the show?





3. Kathy, James and Henry share some stickers.  
The number of James' stickers is 25% that of Henry's.  
The number of Kathy's stickers is 700% that of James's.  
The three children have a total of 456 stickers.  
How many stickers does Kathy receive?
4. There are three boxes of chocolate.  
Box A contains thrice as many chocolates as Box B.  
Box B contains twice as many chocolates as Box C.  
There are 40 more chocolates in Box A than Box C.  
How many chocolates are there in Box B?

5. There were 8 times as many students as teachers in the hall.  
There were 3 times as many girls as boys.  
There were 70 fewer teachers than girls.  
How many people were in the hall?

6. Andrew had 4 times as many stamps as Brandon.  
Caroline had twice as many stamps as Andrew and Brandon.  
Caroline had 234 stamps more than Brandon.  
How many stamps did the three children have altogether?

7. Ali, Ben, Cindy and David shared a box of pens.  
Ali received 20% of the total number of pens which Ben, Cindy and David received.  
Ben received 50% of the total number of pens which Ali, Cindy and David received.  
Cindy received 80% of the total number of pens which Ali, Ben and David received.  
David received 6 pens. How many pens were in the box at first?

8. Freddy, Linda and Winnie each owned a collection of comics.  
The total collection owned by Linda and Winnie was  $\frac{3}{2}$  as many comics as Freddy owned.  
Linda owned  $\frac{4}{5}$  as many comics as the total collection owned by Freddy and Winnie.  
If Winnie owned 169 fewer comics than Linda, how many comics did each child have?