# Higher Order Thinking Skills <br> Primary 5 

## Lesson 3: <br> Unit Transfer Method (III)

enquiry@mathsheuristics.com
www.mathsheuristics.com
www.facebook.com/mathsheuristics

## LESSON 3 Before and After with Comparison

## GUIDED EXAMPLE 1

The sum of two numbers is 145 .
$10 \%$ of the first number is 2 more than $\frac{2}{5}$ of the second number.
Find the two numbers.

## GUIDED EXAMPLE 2

Kelly had \$40 more than Eileen.
Kelly donated $\frac{1}{6}$ of her money while Eileen donated $\frac{1}{4}$ of her money.
Given that Kelly donated $\$ 10$ less than Eileen,
find the total amount of money the children had left.

## GUIDED EXAMPLE 3

Jianwei had 100 more guppies than angelfish.
He sold $\frac{4}{5}$ of his guppies and $\frac{1}{2}$ of the angelfish.
There were 90 fishes left.
Find the total number of fish he had at first.

## GUIDED EXAMPLE 4

Mr Lee had 160 fewer pears than apples.
He sold $\frac{1}{3}$ of the pears and $\frac{5}{8}$ of the apples.
He had 38 fewer apples than pears left.
Find the total number of apples and pears that Mr Lee had at first.

## GUIDED EXAMPLE 5

An enrichment workshop was held over a period of two days.
On the first day, the number of boys was 60 more than the number of girls.
On the second day, the number of boys decreased by $20 \%$
but the number of girls increased by $30 \%$.
Given that there were 468 children on the second day, how many children were there on the first day?

## BUILD YOUR UNDERSTANDING

1. Calvin and Peter have a total savings of $\$ 4190$.
$\frac{2}{3}$ of Calvin's savings is $\$ 340$ less than $\frac{2}{7}$ of Peter's savings.
How much money does Calvin have?
2. There were 235 more blue balloons than red balloons at a party. After $\frac{4}{5}$ of the blue balloons and $\frac{3}{4}$ of the red balloons had burst, there were 92 balloons left.
How many balloons were there altogether at first ?
3. Sally had $\$ 285$ more than Benson at first.

After Sally spent $\frac{1}{3}$ of her money and Benson spent $\frac{3}{4}$ of his money, the amount of money that Sally had left was $\$ 330$ more than the amount that Benson had left.
How much money did Benson have at first?
4. Trisha and Belinda were baking cookies for sale.
$\frac{1}{3}$ of Trisha's cookies was 16 more than $\frac{1}{4}$ of Belinda's cookies.
The next day, Trisha baked more cookies and her total number of cookies increased by $\frac{1}{3}$. Belinda's family ate $\frac{1}{2}$ of the cookies that Belinda baked. In the end, Trisha had 100 more cookies than Bernice.
How many cookies did both girls have altogether in the end?
5. Last year, the number of men who signed up for a marathon was $80 \%$ the number of women. This year, the number of men decreased by $50 \%$ and the number of women increased by $30 \%$. A total of 4675 men and women signed up for the marathon this year.
What was the total number of people who signed up for the marathon last year?

## CHALLENGE YOURSELF

There were 200 more apples than pears at a fruit stall.
After $\frac{1}{4}$ of the apples and $\frac{2}{7}$ of the pears were sold, there were 170 more apples than pears left.
a) How many apples were there at the fruit stall at first?
b) How many pears were left at the fruit stall in the end?

