

Unit Transfer Method

Primary 5

Before & After

Lesson 5: Differentiate Before & After

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Lesson 5: Revision-Before & After Scenarios

How to Identify?

There are four basic scenarios where the Before and After may be applied.

SINGLE UNCHANGED

	A	B
Before		
Change		
After		

→

TOTAL UNCHANGED

	A	B
Before		
Change		
After		

→

DIFFERENCE UNCHANGED

	A	B
Before		
Change		
After		

→

ALL CHANGING

	A	B
Before		
Change		
After		

→

GUIDED EXAMPLE 1

There were $\frac{3}{4}$ as many students in Camp A as in Camp B.

After 25 pupils joined Camp B,

there were now $1\frac{3}{4}$ times as many students in Camp B as Camp A.

Find the number of students in Camp A.

GUIDED EXAMPLE 2

There were some apples and oranges in a carton.

$\frac{1}{4}$ of the fruits were apples.

When 40 apples were added to the carton,

the ratio of the number of apples to the total number of fruits became 3 : 8.

Find the total number of fruits at the end.

GUIDED EXAMPLE 3

Eugene has thrice as many marbles as Mark.
How many marbles must Eugene give to Mark
so that each of them will have 398 marbles?

GUIDED EXAMPLE 4

The ratio of Kevin's cards to John's cards is 5 : 7.

Kevin gave 20 cards to John.

As a result, Kevin has half as many cards as John.

How many cards did they have altogether?

GUIDED EXAMPLE 5

There were 310 adults and 870 children at a party.

One hour later, equal number of adults and children left the party.

As a result, there was 20% as many adults as children remaining.

How many people are there remaining in the party?

GUIDED EXAMPLE 6

Uncle John is 24 years older than his nephew.
His age will be 3 times his nephew's in 6 years' time.
Find the sum of their present ages.

GUIDED EXAMPLE 7

The ratio of the number of men to the number of women in an auditorium was 9 : 5.
After another 92 women and 12 men entered the auditorium,
the number of men is the same as the number of women in the auditorium.
How many men are there in the auditorium now?

BUILD YOUR UNDERSTANDING

1. There was a total of 500 red and blue beads in a box.
The ratio of the number of red beads to the number of blue beads was 2 : 3.
How many red beads must be added to the box so that the ratio of the number of red beads to the number of blue beads became 2 : 1?

2. Mrs. Lau had 0.6 times as many peaches as mangoes.
After selling 96 mangoes,
the number of mangoes became 0.6 times the number of peaches.
Find the number of peaches Mrs. Lau had.

3. Davidson has $\frac{2}{3}$ as many marbles as Harvey.
Harvey gave 20 marbles to Davidson and they now have an equal number of marbles.
How many marbles did the two boys have altogether?

4. The ratio of the number of pupils in Class A to the number of pupils in Class B was 16 : 11. When 8 pupils from Class A were transferred to Class B, the ratio of the number of pupils in Class A to the number of pupils in Class B became 4 : 5. How many pupils were there in Class B at first?

5. Joan had \$1382 and her brother had \$428.
After their father gave each of them an equal amount of money,
Joan now has twice as much money as her brother.
How much did their father give each of them?

6. Melvin had an equal number of goldfish and guppies in his pond. After 28 goldfish and 196 guppies had been sold, the number of guppies is now 20% that of the number of goldfish. How many guppies did he have at first?

7. Jenny and Chris went to a sale at Tongs Department Store.
Chris had 3 times as much money as Jenny.
After Jenny spent \$9 and Chris spent \$55,
Jenny had 5 times as much money as Chris.
How much money did Jenny have at first?