Overcoming Barriers to Comparing Answers and Scales

Problem No. 8
A project is planned to be completed in 9 months by 140 employees. If the project is to be accelerated, then in order to complete it in 7 months more employees must be added....
A. 40 people
B. 80 people
C. 150 people
D. 180 people

Discussion
There are two separate comparisons in the problem above. The first step is to unify the comparisons:

Question No. 9
The ratio of Amir and Budi's money is 2 : 3, while the ratio of Budi and Cici's money is 4 : 5. If their total money is Rp3,500,000, then the amount of Amir's money is....
A. IDR 600,000.00
B. IDR 650,000.00
C. IDR 700,000.00
D. Rp800,000.00

Discussion

The connector is Budi, find the kpk between the numbers 3 and 4, which is 12. So the first comparison multiplied by 4, the second multiplied by 3 becomes:

Once they are the same in the Budi section, stack them together:

So Amir's money is

Question No. 10
The ratio of Faiz and Bayu's marbles is 4: 11. Their total number of marbles is 60. The difference between their marbles is....
A. 16 items
B. 24 items
C. 28 items
D. 44 items

Discussion
The difference between Faiz and Bayu is 11 - 4 = 7. So the difference in marbles is:

Comparative Mathematics

Comparison is one of the important things to learn in math. We use the concept of comparison very often in everyday life. For example, comparing ages, comparing the size of objects, or comparing the price of an item. Everything uses the concept of comparison. Therefore, pay attention to the explanation of mathematical comparison below:

Explanation of Smp Math Comparison

To understand the concept of comparison consider the example problem given below:

Comparison Problem Examples and Discussion

It is known that the father's age is 60 years and the mother's age is 45 years, while Budi's age is 15 years and Rani's age is 10 years. Try to compare the ages of the four family members!

Answer:

Find the number that divides the two numbers being compared:

Age ratio of father and mother = 60 : 45 (both numbers are equally divisible by 15) then the ratio is 4: 3

The age ratio of father and Budi = 60 : 15 (both numbers are equally divisible by 15) then the ratio is 4 : 1

The age ratio of father and Rani = 60 : 10 (both numbers are equally divisible by 10) then the ratio is 6 : 1

Mother and Budi's age ratio = 45 : 15 (both numbers are equally divisible by 15) then the ratio is 3 : 1

Mother and Rani's age ratio = 45 : 10 (both numbers are equally divisible by 5) then the ratio is 9: 2

The age ratio of Rani and Budi = 10 : 15 (both numbers are equally divisible by 5) then the ratio is 2: 3