Name: _____   Date: _____

Problem Sum Worksheet

Topic : Before and After Questions

Video Solution: http://www.omyclassroom.com/before-and-after.html

SCAN ME

Topic 1 : 1st variable changed 2nd variable kept constant – Qn 1 (Difficulty: Medium)

744 girls and 1498 boys signed up for a Mathematics competition. On the actual day of the competition, some boys were absent. As a result, the ratio of the number of girls to the number of boys taking part in the competition was 6 : 11. How many boys were absent for the competition?

Topic 1 : 1st variable changed 2nd variable kept constant – Qn 2 (Difficulty: Low)

Ann and Bailey had a total of 680 dolls. After Ann bought 20 more dolls, the ratio of the number of dolls Ann had to Bailey was 3 : 1. How many dolls did Ann have at first?

1

Topic 2 : Adding a number to form another unit – Qn 1 (Difficulty: Medium)

In a crate, $\frac{2}{5}$ of the fruits were apples and the rest were pears.

$\frac{1}{2}$ of the apples and 74 pears from the crate were sold. There were then a

total of 150 apples and pears left in the crate. What was the total number

of apples and pears in the crate at first?

Topic 3 : Internal Transfer - calculate difference only -Qn 1 (Difficulty: Low)

Joe had $4315 more than Kim at first. Then, Kim gave Joe $268.
How much more money did Joe have than Kim in the end?

2

Topic 4 : Internal Transfer - constant total – Qn 1 (Difficulty: Medium)

There is a total of 8.4 kg of salt in 3 containers, X, Y and Z altogether. 0.4 kg of salt is moved from container X to container Y and 1.5 kg of salt is moved from container Z to container Y.   In the end, there is an equal amount of salt in each container.

(a)   How much salt is there in each container in the end?

(b)   How much salt is there in container Y at first?

Topic 4 : Internal Transfer - constant total – Qn 2 (Difficulty: Low)

Harley and Dawn shared some cards in the ratio of 7 : 1. When Harley gave Dawn 27 cards, they each had the same number of cards. How many cards did Harley have at first?

3

Topic 4 : Internal Transfer - constant total – Qn 3 (Difficulty: Low)

There are 235 pupils in Room A and 567 pupils in Room B. A teacher transferred some pupils from Room B to Room A so that both rooms have the same number of pupils. How many pupils were there in each room after the transfer?

Topic 4 : Internal Transfer - constant total – Qn 4 (Difficulty: High)

Anna, Betsy and Charlene had a total of 168 marbles. Charlene gave 15 marbles to Betsy. Then, Betsy gave 8 marbles to Anna. In the end, the ratio of the number of marbles that Anna had to the number of marbles that Betsy had to the number of marbles that Charlene had is 2 : 5 : 7. How many marbles did Betsy have at first?

Topic 5 : Remove same amount - constant Difference – Qn 1 (Difficulty: Medium)

In a library, there were 972 fiction books. The number of fiction books was 3 times the number of non-fiction books. An equal number of fiction books and non-fiction books were given away to charity. In the end, the number of fiction books was 4 times the number of non-fiction books. How many fiction books were given away?

Topic 5 : Remove same amount - constant Difference – Qn 2 (Difficulty: Medium)

A bakery had 480 cupcakes and 300 muffins. After selling an equal number of cupcakes and muffins, the number of cupcakes left became 4 times the number of muffins left. How many muffins were sold?

Topic 6 : Total changed - Qn 1 (Difficulty: Medium)

Jake and Kim had a total of $3139 at first. After Jake spent $254 and Kim spent $185, Jake had 4 times as much money as Kim had left. How much money did Jake have at first?

Topic 6 : Total changed - Qn 2 (Difficulty: High)

There was an equal number of girls and boys in the hall at first. After 160 girls and 500 boys left the hall, there were three times as many girls as boys who remained in the hall.

(a) What fraction of the children who remained in the hall were girls?

(b) How many boys and girls were there in the hall altogether at first?

Topic 7 : Unknown number of groups (Difficulty: High)

The chairs in a school hall were arranged in rows such that there were exactly 12 chairs in each row. For a musical, Mr Tan brought in 3 more chairs into the hall and rearranged all the chairs. There are now exactly 9 chairs in each row and 11 more rows than before. How many chairs were there in the concert hall for the musical?