

## P4 & P5 Questions (22 Apr 2012)

- 1)  $\frac{3}{5}$  of boys is the same as  $\frac{4}{9}$  of girls. What is the ratio of the number of boys to the number of girls?

### Solution:

$$\frac{3}{5} \text{ of boys} = \frac{4}{9} \text{ of girls}$$

$$\frac{12}{20} \text{ of boys} = \frac{12}{27} \text{ of girls}$$

**Boys : Girls**

20 : 27

Ans. The ratio is **20 : 27**.

- 2) The ratio of the number of male members to the number of female members in an association is 8 : 13. After 126 female members left the association, the ratio become 4 : 5. Find the number of male members at first?

Solution:

	<u>Males</u>	<u>Females</u>
Before	8 units	13 units
Left		- 126
After	4 parts $\times 2$	5 parts $\times 2$
	= 8 units	= 10 units

$$3 \text{ units} \rightarrow 126$$

$$1 \text{ unit} \rightarrow 126 \div 3 = 42$$

$$8 \text{ units} \rightarrow 42 \times 8 = 336$$

Ans. There were 336 male members at first.

- 3) Lance gave out 520 stars to his students in Primary Two and Primary Three in a day. Each Primary Two student receives 6 stars and each Primary Three student receives 8 stars. The Primary Three students received 40 more stars than those in Primary Two. How many more Primary Two students were there?

**Solution:**

Total no. of stars P2 received: 1 unit

Total no. of stars P3 received: 1 unit + 40

$$2 \text{ units} + 40 \rightarrow 520$$

$$2 \text{ units} \rightarrow 520 - 40 = 480$$

$$1 \text{ unit} \rightarrow 480 \div 2 = 240$$

$$1 \text{ unit} + 40 \rightarrow 240 + 40 = 280$$

No. of P2 students:  $240 \div 6 = 40$

No. of P3 students:  $280 \div 8 = 35$

Difference:  $40 - 35 = 5$

Ans. There are **5 more** Primary Two students.

4)  $\frac{2}{3}$  of the parents who attended the seminar are females and the rest are males. After 10 females and 10 males left the seminar, the number of males left is  $\frac{1}{3}$  the number of females.

- a) How many parents were there at first?
- b) Express the number of parents who left the seminar as a fraction of the total number of parents.

### Solution:

	<u>Females</u>	<u>Males</u>	<u>Constant Difference</u>
Before	2 units $\times 2$	1 unit $\times 2$	1 unit $\times 2$
	4 units	2 units	2 units
Left	- 10	- 10	
After	3 units	1 unit	2 units

$$1 \text{ unit} \rightarrow 10$$

$$6 \text{ units} \rightarrow 10 \times 6 = 60$$

$$\frac{\text{No. of parents left}}{\text{Total no. of parents}} = \frac{20}{60}$$

$$= \frac{1}{3}$$

Ans. (a) **60 parents**

(b)  **$\frac{1}{3}$**