1.  Angela bought some cupcakes. Each cupcake cost $2. For every 6 cupcakes Angela bought, she was given 1 free cupcake. If Angela bought 47 cupcakes altogether, what was the total amount of money she spent?
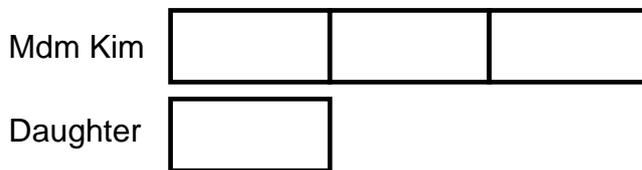
*Solution:*

> Cost of 6 cupcakes → $12
> 1 group → 7 cupcakes ($12)
> 47 ÷ 7 = 6 groups   R 5 cupcakes
> 6 groups → $12 × 6 = $72
> 5 cupcakes → $2 × 5 = $10
> Total amount of money spent → $72 + $10 = $82
>
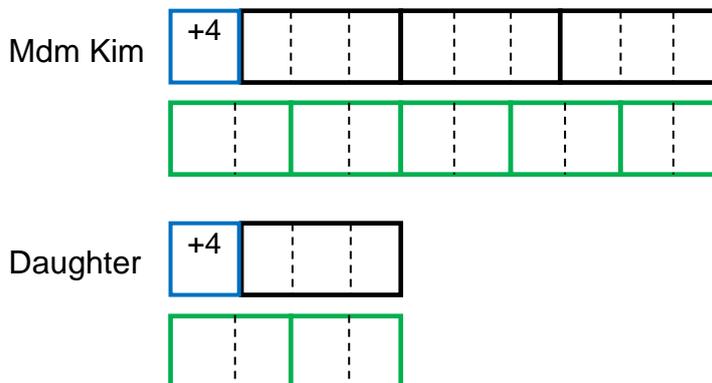> **Ans: Angela spent a total of $82.**

2.  Two years ago, Mdm Kim was thrice as old as her daughter. In two years' time, her daughter will be $\frac{2}{5}$ as old as her. How old is Mdm Kim now?
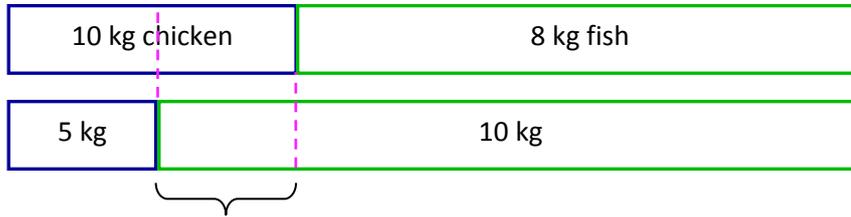
*Solution:*

> 2 years ago,



> 2 years later,



> 1 unit → 4 years
> 10 units → 40
> 40 − 2 = 38
>
> **Ans: Mdm Kim is 38 years old now.**

3.    Mrs Tan had just enough money to buy 10 kg of chicken and 8 kg of fish.  Instead, she bought 5 kg of chicken and 10 kg of fish.  If Mrs Tan decided to spend all her money on chicken only, how many kilograms of chicken could she buy?

*Solution:*

| 10 kg chicken | 8 kg fish |
|---|---|

| 5 kg | 10 kg |
|---|---|

5 kg chicken → 2 kg fish

20 kg chicken → 8 kg fish
Weight of chicken → 20 + 10 = 30 kg

**Ans: She could buy 30 kg of chicken.**


4.    Aston and Brian had an equal sum of money at first.  Aston received $45 from his mother.  Later, Aston and Brian donated $80 and $15 to charity respectively.  In the end, Brian had 4 times more money than Aston.  How much money did Brian have at first?

*Solution:*

Donated $80

Aston | | $45 |

Brian | | $15 |

4 times more
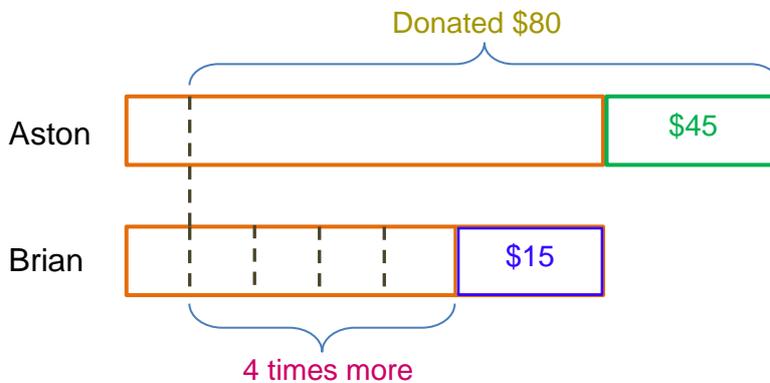
4 units → $80 – $45 – $15 = $20
1 unit → $5
5 units → $25
Brian's money at first → $25 + $15 = $40

**Ans: Brian had $40 at first.**

5. Miss Chin bought some markers from a bookshop. Of the markers, 0.5 of them were blue markers while $\frac{2}{5}$ of them were red markers. The rest were green markers. If Miss Chin bought 48 fewer green markers than red markers, how many markers did she buy altogether?

*Solution:*

$0.5 = \frac{5}{10}$ ; $\frac{2}{5} = \frac{4}{10}$



| | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|

Blue        Red     Green
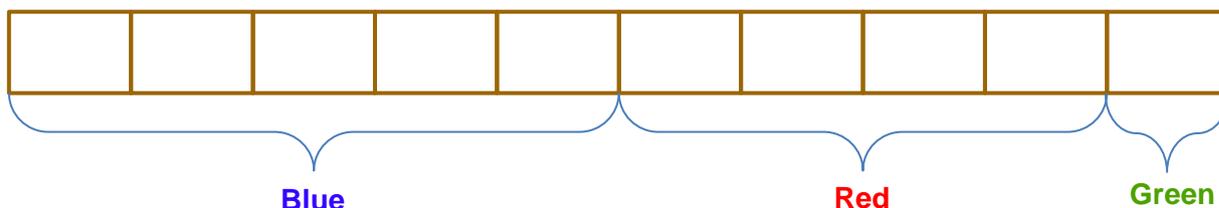
Green : 1 unit ; Red : 4 units
4 – 1 = 3 units
3 units $\left(\text{or } \frac{3}{10}\right)$ → 48
1 unit → 16
10 units → 160

**Ans: Miss Chin bought 160 markers altogether.**

6. Wendy bought some sweets for her friends. If she gives 7 sweets to each of her friends, she would have 8 sweets remaining. If she gives 9 sweets to each of her friends, she would need another 16 sweets.
(a) How many friends did Wendy have?
(b) How many sweets did Wendy buy?

*Solution:*

Actual Number of Sweets

7 sweets each

9 sweets each

8 sweets
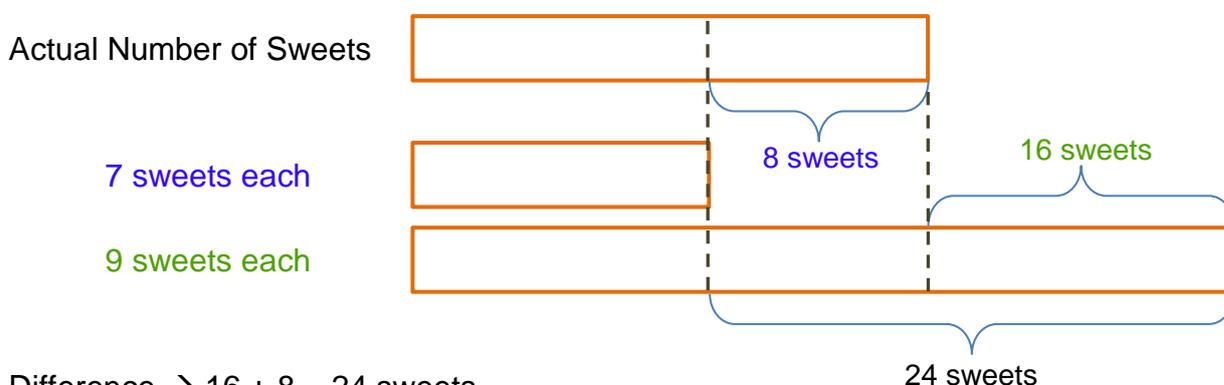
16 sweets

24 sweets

Difference → 16 + 8 = 24 sweets
9 – 7 = 2 sweets
Number of friends → 24 ÷ 2 = 12
Number of sweets → 7 × 12 + 8 = 92

**Ans: (a) Wendy had 12 friends, (b) Wendy bought 92 sweets.**