Problems of the Day *Day 9 Answers*

1 The cost of a pineapple is half the cost of a melon.





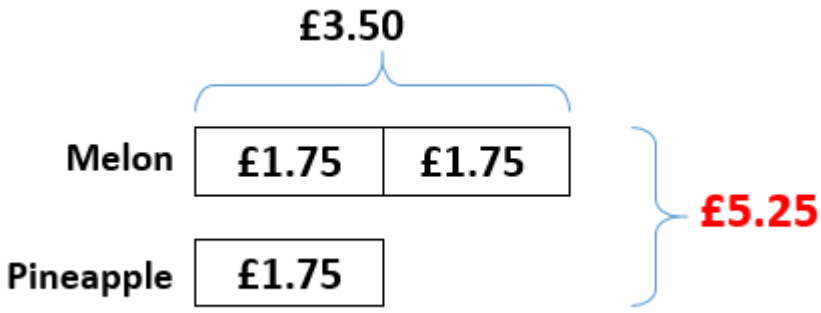
£3.50 each

How much does the pineapple and melon cost altogether?

Draw a bar:



We can see that each part must be £1.75



The total cost must be **£5.25**

2 Tommy thinks of a number.



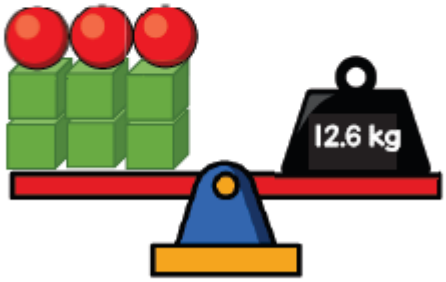
Does Tommy's number have to be odd? Explain your answer.

If 5 is a factor of Tommy's number, his number could be any multiple of 5.

Any multiple of 10 is also a multiple of 5 (eg 10, 20, 30 etc). These are all even numbers, so Tommy's number could be even.

3 Gina balances some scales.

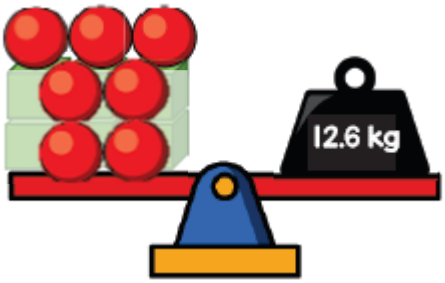




What is the mass of a cube?

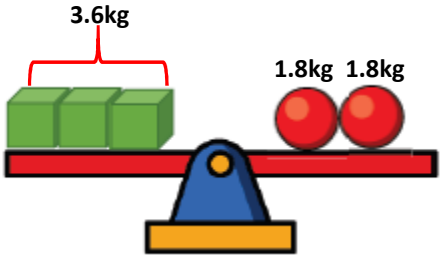
There are a few ways to tackle this question.

I saw, in the first image, that two red balls weigh the same as 3 cubes. So I imagined the 2 groups of 3 cubes in the second image being replaced by 2 groups of 2 balls:



Now I can see that 7 balls weigh 12.6kg, so 1 ball must weigh 12.6kg ÷ 7 = 1.8kg

If I label the weight of red balls on the first image, I can see the weight of the 3 cubes.



I can see that 3 cubes must weigh 3.6kg, so each cube must weigh 3.6kg ÷ 3 = **1.2kg**