



Fruity Totals

In the diagram below, each fruit has a value between 1 and 15 inclusive.
The sum of the values of the fruit in each row and column is shown.
Can you work out the value of each individual fruit?

$$3 \text{ bananas} + 1 \text{ Apple} = 39$$

$$1 \text{ bananas} + 1 \text{ Apple} + 2 \text{ Plums} = 45$$

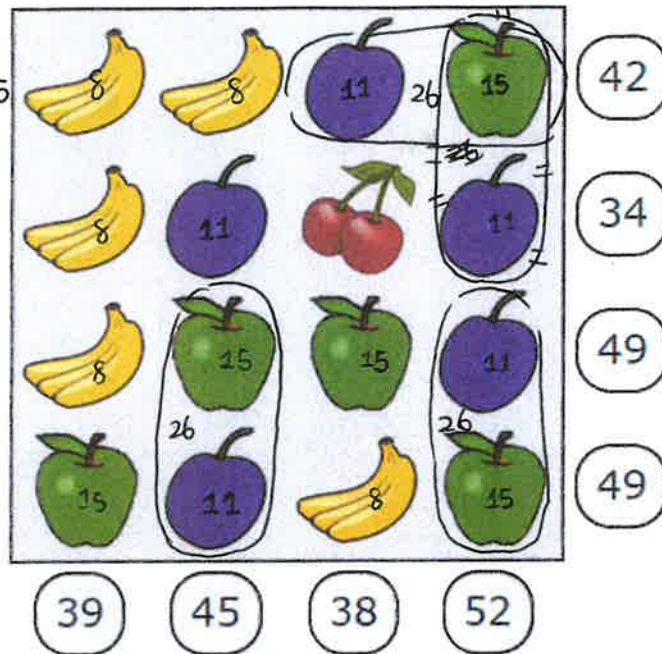
$$\begin{array}{r} 26 \\ 2 \overline{) 52} \\ \underline{4} \\ 12 \\ \underline{12} \\ 0 \end{array}$$

$$3 \times 8 = 24$$

$$39 - 24 = 15$$

$$8 + 22 = 30$$

$$34 - 30 = 4$$



$$42 - 26 = 16 \quad 16 \div 2 = 8$$

$$\text{BANANA} = 8$$

$$\text{APPLE} = 15$$

$$\text{PLUM} = 11$$

$$\text{CHERRY} = 4$$

Answer: 5

FIRST, the leftmost vertical line. Two apple add two plum is 52, so in this line, we can know, one apple add one plum is $52 \div 2 = 26$. This problem consists of three groups of apples and plums.

NEXT, Let's look at the top row now, it's two bananas add one plum and a apple, and we know one apple add one plum is 26, so we can use $42 - 26 = 16$, two bananas are 16, so one is $16 \div 2 = 8$.

THEN, we look at the leftmost column, it's three bananas add one apple is 39, and now we know one banana is 8, so three banana is $3 \times 8 = 24$, and one apple is $39 - 24 = 15$.

AFTER THIS, we know one apple add one plum is 26, and we also know one apple is 15, so we can know one plum is $26 - 15 = 11$.

LAST, now we only don't know how much is the cherry, but we minus the others to know the cherry, so we look at the second line, there is a cherry in that line, we use $34 - 8 - 11 - 11 = 4$, now we can know the total of other three, so we can use $34 - 30 = 4$ know the number of cherry.