

Friday 15th May

Today's task will be problem solving. We'll start with 2 sets of warm up questions, then 2 sets of similar, but more challenging questions.

1 What are the missing digits?

$$\begin{array}{|c|} \hline 3 \\ \hline \end{array} \begin{array}{|c|} \hline \\ \hline \end{array} + \begin{array}{|c|} \hline \\ \hline \end{array} \begin{array}{|c|} \hline 5 \\ \hline \end{array} = \begin{array}{|c|} \hline 7 \\ \hline \end{array} \begin{array}{|c|} \hline 6 \\ \hline \end{array}$$

2 Annie and Ron each think of a number.

I'm thinking of the number 6

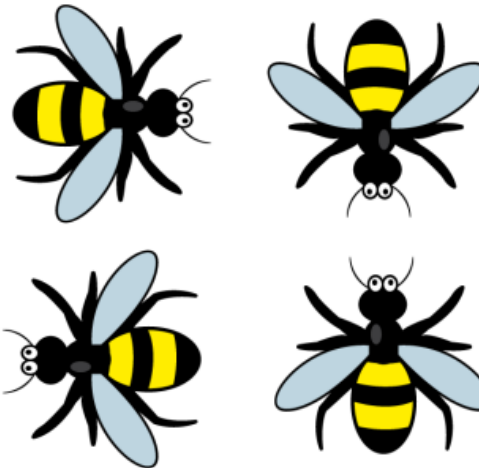


The sum of their numbers is 25
What is Ron's number?

3 The bee makes a half turn.



Which way is the bee now facing?



- 1 There are 5 marbles in a bag.



Ron has 10 bags of marbles.

He puts 1 more marble in each bag.

How many marbles are there in total now?

- 2 Work out the missing digit.

$$\boxed{5} + \boxed{} + \boxed{4} = 16$$

- 3 A toy train costs £4 more than a rocket.



The train costs £15

How much does the train and the rocket cost in total?

1 What are the missing digits?

$$\begin{array}{|c|} \hline 3 \\ \hline \end{array} \begin{array}{|c|} \hline \\ \hline \end{array} + \begin{array}{|c|} \hline \\ \hline \end{array} \begin{array}{|c|} \hline 5 \\ \hline \end{array} = \begin{array}{|c|} \hline 1 \\ \hline \end{array} \begin{array}{|c|} \hline 1 \\ \hline \end{array} \begin{array}{|c|} \hline 1 \\ \hline \end{array}$$

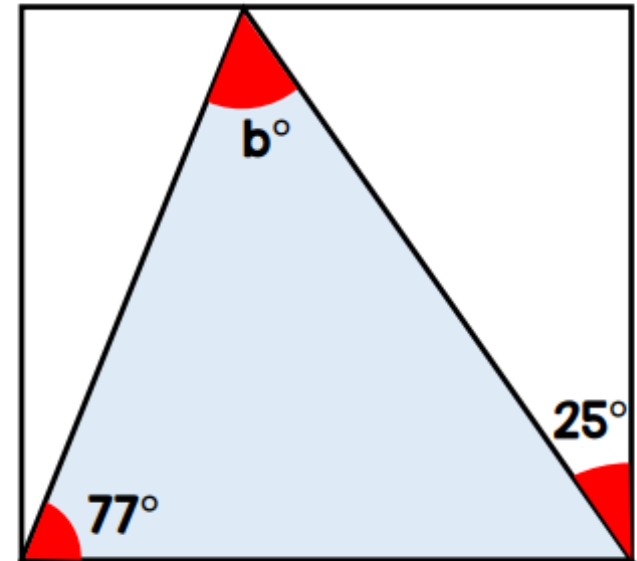
2 Annie and Ron each think of a number.

I'm thinking of the number 6



The product of their numbers is 762
Work out Ron's number.

3 Find the size of angle b.



1 Marbles are put into bags of 10



- 67 bags of marbles are packed.
- 3 more marbles are added to each bag.

How many marbles are there in total now?

2 Work out the missing digits.

$$\boxed{5} \times \boxed{} \times \boxed{} = 105$$

3 A toy train costs three times as much as a rocket.



The total cost of the train and rocket is £52

How much does the train cost?

Answers

1 What are the missing digits?

$$\begin{array}{|c|c|} \hline 3 & 1 \\ \hline \end{array} + \begin{array}{|c|c|} \hline 4 & 5 \\ \hline \end{array} = \begin{array}{|c|c|} \hline 7 & 6 \\ \hline \end{array}$$

2 Annie and Ron each think of a number.

I'm thinking of the number 6



The sum of their numbers is 25

What is Ron's number? $25 - 6 = 19$

Ron's number is 19

3 The bee makes a half turn.



Which way is the bee now facing?



- 1 There are 5 marbles in a bag.



$$\begin{aligned}5 \times 10 &= 50 \\1 \times 10 &= 10 \\50 + 10 &= 60\end{aligned}$$

Ron has 10 bags of marbles.

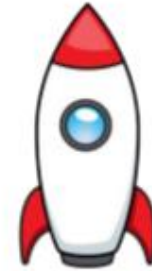
He puts 1 more marble in each bag.

How many marbles are there in total now? **60 marbles**

- 2 Work out the missing digit.

$$\boxed{5} + \boxed{7} + \boxed{4} = 16$$

- 3 A toy train costs £4 more than a rocket.



The train costs £15

How much do the train and the rocket cost in total?

$$\begin{aligned}\pounds 15 - 4 &= \pounds 11 \\ \pounds 15 + \pounds 11 &= \pounds 26\end{aligned}$$

Total cost is £26

1 What are the missing digits?

$$\begin{array}{|c|c|} \hline 3 & 6 \\ \hline \end{array} + \begin{array}{|c|c|} \hline 7 & 5 \\ \hline \end{array} = \begin{array}{|c|c|c|} \hline 1 & 1 & 1 \\ \hline \end{array}$$

2 Annie and Ron each think of a number.

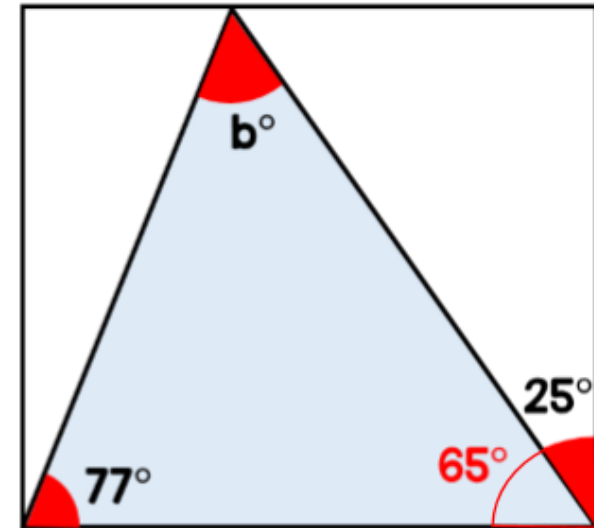
I'm thinking of the number 6



The product of their numbers is 762
Work out Ron's number.

$$762 \div 6 = 127$$

3 Find the size of angle b.



$$90 - 25 = 65$$

$$65 + 77 = 142$$

$$180 - 142 = 38$$

$$b = 38^\circ$$

1 Marbles are put into bags of 10



- 67 bags of marbles are packed.
- 3 more marbles are added to each bag.

How many marbles are there in total now? $67 \times 13 = 871$

2 Work out the missing digits.

$$\boxed{5} \times \boxed{7} \times \boxed{3} = 105$$

$$105 \div 5 = 21$$

3 A toy train costs three times as much as a rocket.



The total cost of the train and rocket is £52

How much does the train cost?

$$52 \div 4 = 13$$

$$13 \times 3 = 39$$

The train costs £39