

L.O. I can solve worded problems using addition and subtraction.

$$7 \times 8 = 56$$

$$6 \times 3 = 18$$

$$4 \times 7 =$$

Problem:

The coach had 18 passengers.

It stopped.

6 people got off and 10 people got on.

How many passengers are now on the coach?



1st step: Calculation needed

$$18 - 6 = 12$$

2nd step: Calculation needed

$$12 + 10 = 22$$

Answer to calculation:

12

Answer to problem:

22

Problem:

Matrice has 55p and Karen has 15p.

How much more do they need to buy a magazine for £1?



1st step: Calculation needed

$$55\text{p} + 15\text{p} = 70$$

2nd step: Calculation needed

$$100\text{p} - 70\text{p} = 30\text{p}$$

Answer to calculation:

70p

Answer to problem:

30p

Problem:

2 UFOs landed on earth.

Each UFO contained 20 aliens.

12 of the aliens did not like earth so returned to their home planet.

How many aliens remained on earth?



1st step: Calculation needed

$$2 \times 20 = 40$$

2nd step: Calculation needed

$$40 - 12 = 28$$

Answer to calculation:

40

Answer to problem:

28

A Problem to Solve

Alfie has a two-step calculation. He needs to write a word problem for which the calculation provides the answer.

$$487 + 1026 = 1513, 1513 - 876 = 637$$



Write a word problem for the above calculation.

How can you improve your problem?

Write a two-step calculation for your partner to create a word problem for.

Possible answer

I had 487 Lego blocks, and my friend gave me 1026. Then I had 1513, but I lost 876. How many I block I have now?



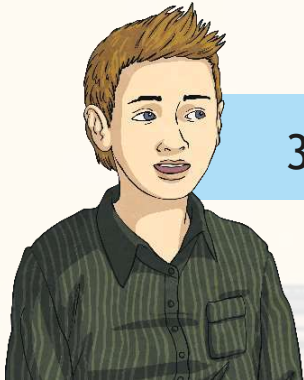
Which Order?

Fatima, Alfie and Laura are all finding the total of $340 + 271 + 160$.
Here are the methods they used:

$$340 + 271 = 611, 611 + 160 = 771$$



$$340 + 160 = 500, 500 + 271 = 771$$



$$34 + 27 + 16 = 77,$$

so $340 + 270 + 160 = 770$,
so $340 + 271 + 160 = 771$

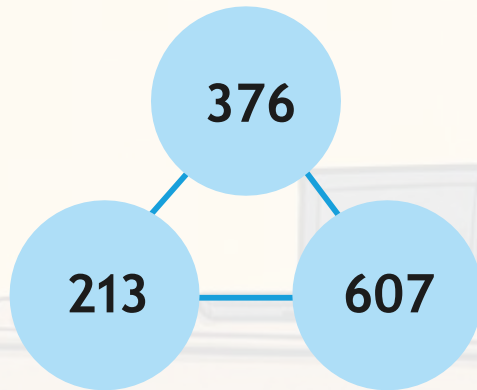


Discuss each method with a partner and decide which ones you might use. Could you use a different method altogether?

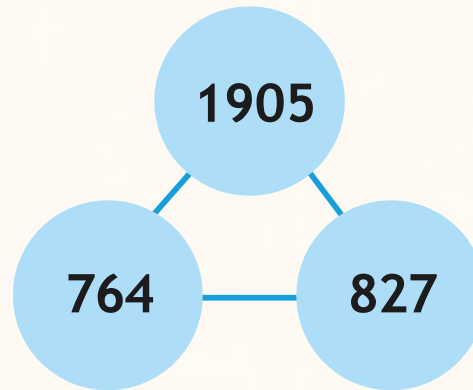
Triangles

Fatima, Alfie and Laura each make a number triangle. For each, using addition and subtraction, find the largest and smallest number that can be made using each number.

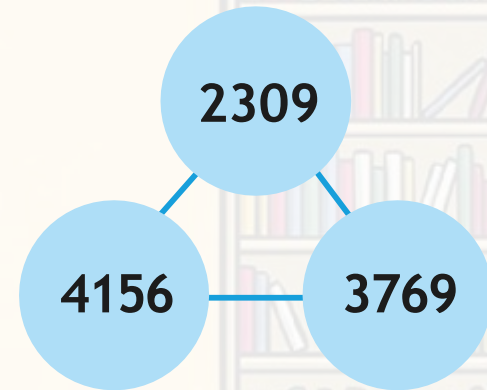
You can only use each number once and your answer must be greater than 0.



Fatima



Alfie

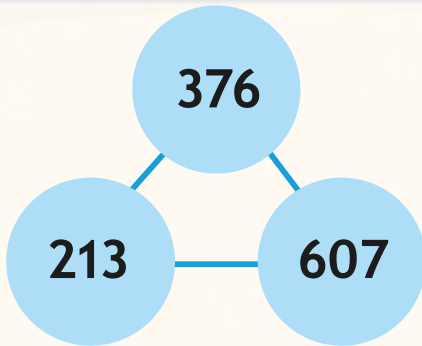


Laura

Compare your answers with a partner and suggest any rules to finding the largest and smallest numbers.



Triangles Answers



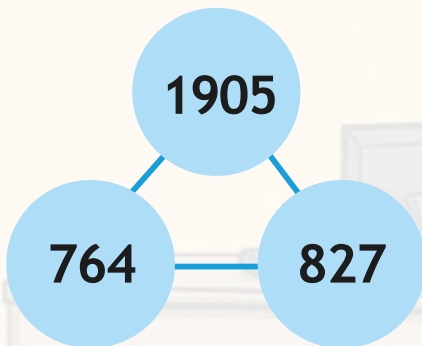
Fatima:

$$376 + 213 + 607 = 1196;$$

$$376 + 213 = 589,$$

$$607 - 589 = 18$$

The largest is found by adding the 3 numbers.



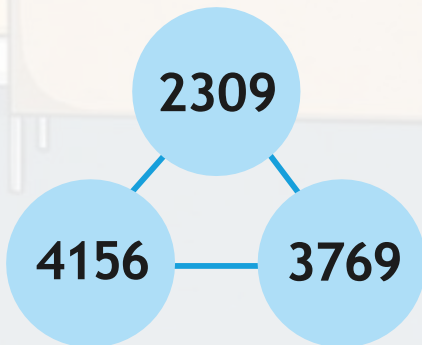
Alfie:

$$1905 + 764 + 827 = 3496;$$

$$764 + 827 = 1591,$$

$$1905 - 1591 = 314$$

The smallest is the difference between the largest and the sum of the other 2 numbers.



Laura:

$$2309 + 4156 + 3769 = 10,234;$$

$$2309 + 3769 = 6078,$$

$$6078 - 4156 = 1922$$



What's Wrong?

Fatima is working on this word problem:

On one day, a cinema has 4012 adult, 367 student and 1786 child visitors. 1276 of the visitors have cinema cards so do not pay for their tickets. How many tickets were sold on that day?

Fatima uses the following calculations:

$1786 - 1276 = 510$, $4012 + 367 + 510 = 4889$
4889 tickets were sold.



What is wrong with Fatima's answer?

Her answer is correct, but her calculations assume that all the visitors with cinema cards were children.

Discuss which method you would have used.

Multiplication Muddle 6x Table



6×6

Start

1×6

11×6

9×6

Miss a turn.

12×6

10×6

2×6

1×6

3×6

Cover any answer.

24

30

42

60

36

66

6

18

Move forward 3 spaces.

2×6

18

12

6

54

72

42

36

48

30

5×6

4×6

9×6

24

60

66

3×6

How to Play

1. You will need dice, counters to move around the board and counters to cover the answers.
2. Roll the dice and move the correct number of spaces.
3. Solve the calculation on the square you land on or follow the instructions. Find the correct answer on one of the circles.
4. Cover the answer with a counter.
5. If the answer has been covered already, miss a turn.
6. The winner is the player who covers the most answers.



54

72

7×6

Miss a turn.

12

48

Move back 2 spaces.

8×6

Move forward 2 spaces.

7×6

11×6

4×6

12×6

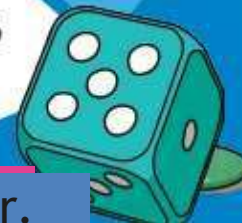
Have an extra turn.

10×6

8×6

5×6

6×6



Y4 Challenge - You can use a small piece of paper instead of a counter.