ASPIRE
INTERNATIONAL SCHOOL

Aspire International School

Name .....

Class.....

1 Write one of these phrases to describe the chance of each event happening.

no chance	poor chance	even chance	good chance	certain

a You will see a dragon today.

no chance

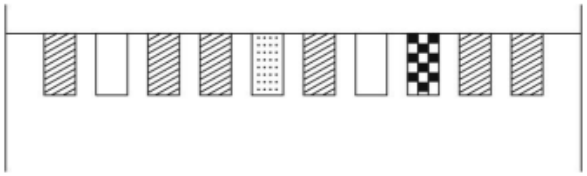
b You will write answers at school today.

certain

c You flip a coin once and it will land on heads.

even chance

2 There are ten towels drying in the sun. You take one without looking.



Are the statements true or false?

a It is certain that I will take a towel with stripes.

False

b There is no chance that I will take a towel with spots.

False

c There is a good chance that I will take a towel with stripes.

True

d There is a poor chance that I will take a towel with spots.

True

e There is a poor chance that I will take a towel with flowers.

False

3) The students in a class stand in 4 rows.

There are 9 students in each row.

How many students are in the class?

36 students

4)

×	3	4	5
2	6	8	10
4	12	16	20
6	18	24	30

5) Are the following number sentences true or false.

Give a reason for each answer.

a $6 \times 7 = 7 \times 2 \times 3$

true; $6 \times 7 = 42$ and $7 \times 2 \times 3 = 42$

b $7 \times 6 = 3 \times 7 + 7$

b false; $7 \times 6 = 42$ and $3 \times 7 + 7 = 28$

6) Δ and ☐ represent two different whole numbers.

$\Delta \times \Delta = 25$

$\Delta \times \Delta \times \Delta = \square$

What are the values of Δ and ☐?

$\Delta = 5$ and $\square = 125$

7)

Look at the following statement.

When you multiply a 2-digit number by a 1-digit number the product is a 3-digit number.

Is the statement always, sometimes or never true?

Explain your answer.

Sometimes true, for example $15 \times 5 = 75$ and $75 \times 5 = 375$

8)

Darius calculates 19×3 using an array. He makes an error.

$20 \times 3 = 60$

$60 - 1 = 59$ so $19 \times 3 = 59$

Explain what Darius has done wrong and correct his answer.

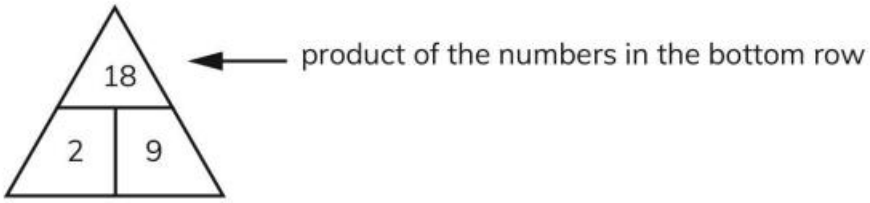
Darius should subtract 3 not 1

$60 - 3 = 57$

10) Circle the highest number that is a factor of 30, 42 and 48.

2 3 6 8

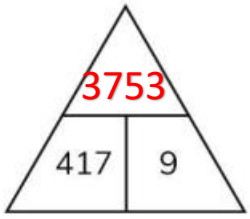
Here is the rule for finding numbers in a triangle.



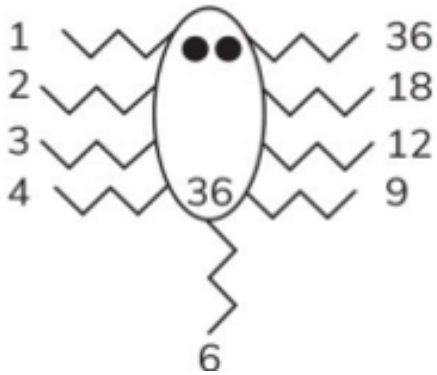
Use this rule to complete this number triangle.

Show your working.

11)



Complete the factor bug for 36.



Lara thinks of a whole number between 1 and 10.

The table shows information about her number.

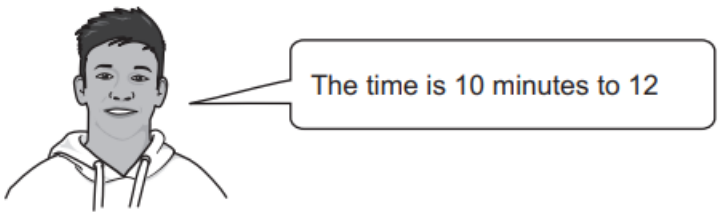
	Yes	No
a multiple of 2	✓	
a multiple of 3		✓
a factor of 6	✓	

What is Lara's number?

2

15) Rajiv looks at his analogue watch.
One hand is pointing to the 10
The other hand is pointing to the 12

Rajiv says,



Rajiv is **not** correct.

Explain the mistake Rajiv has made.

An answer explaining that Rajiv has mixed up the hour and minute hands, e.g. 'He thought the small hand was telling the minutes, but it was pointing to the hours.'

Ahmed draws a shape with straight sides on a piece of paper.
He places a mirror along one side of his shape.
He reflects the shape in the mirror.
The complete shape he sees is a rhombus.

Tick (✓) the name of the shape Ahmed draws.

scalene triangle	
isosceles triangle	✓
rhombus	
square	

17) Four children each have a bag of sweets.

Mike eats 2 sweets from his bag containing 8 sweets.

Oliver eats 2 sweets from his bag containing 10 sweets.

Lily eats 4 sweets from her bag containing 12 sweets.

Mia eats 4 sweets from her bag containing 16 sweets.

Write the names of the children who eat one quarter of the sweets from a bag.

Mike **and** Mia

Jamila has 16 black counters.
She makes a square array using **all** the black counters.

Jamila also has some different coloured counters.
These are shown in the table.

Tick (✓) to show if Jamila can make a square array using **all** the counters of each colour.

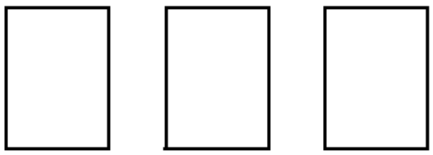
Number of counters	**Can** make a square array using all the counters	**Cannot** make a square array using all the counters
4 red	✓	
12 yellow		✓
18 blue		✓
25 green	✓	

20) Carlos counts back in steps of one thousand.
He starts at 3800

Write the next two numbers that Carlos counts.

2800 1800

21) Eva has three digit cards.



She uses the cards to make a 3-digit number.

Eva says,

'I can **only** make odd numbers with my digit cards.'

Write a digit on each card to make Eva's statement correct.

Any **three** odd digits,
e.g. 1, 5, 7

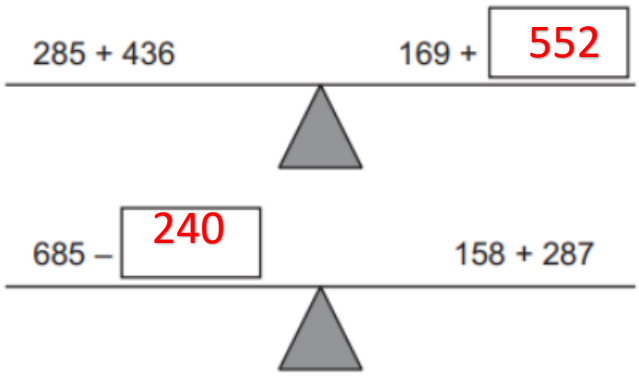
22) complete the number sentence

a) 68469 = 60000 + 8000 + 400 + 60 + 9

b) 699 - 234= 465

c) 55 + 45 = 100

23) Write the correct number in each box to complete the balance scales.



Angelique puts her stamps in two **equal** piles.
Each pile has between 50 and 75 stamps.

Angelique shares one pile equally between 3 friends.
There are no stamps left.

She shares the other pile equally between another 5 friends.
There are 2 stamps left.

Write **all** the possible totals of stamps Angelique could have in each of her two equal piles.

..... stamps

57 and 72 (stamps)