The Haberdashers' Aske's Boys' School
Elstree

7+ Entrance Examination

Sample Paper

MATHEMATICS

Full Name.....

Examination Number .....





1.

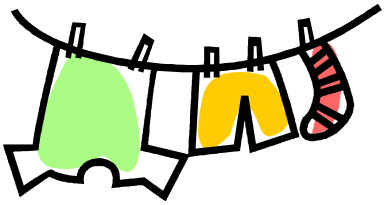
Philip's dog Lucca likes chewing socks.

Yesterday he chewed 6 socks.

How many pairs was that? _____

Philip's mum hung 8 pairs of socks on the washing line.

How many socks were there?

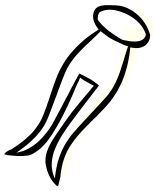


_____

Today there were 17 socks on the line. She took 9 down

and hung 7 more up.

How many are on the line now? _____



Philip's mum hangs 3 socks on the line with 1 peg.

How many pegs does she need for 21 socks?

_____

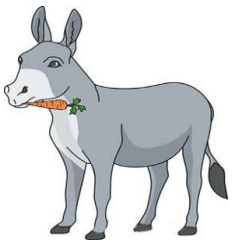
How many pegs would she need for 29 socks? _____

Lucca decides to chew pegs leaving mum just 6.

She decides to group 4 socks to each peg. What is the

largest number of socks she can hang on the line? _____

2.





Anna looks after her pony.

She gives him 2 carrots each time he eats 3 buckets of hay.

On Monday he ate 6 carrots.

How many buckets of hay did he eat on Monday? _____

Last week he got through 36 buckets of hay.

How many carrots did Anna give him last week? _____

3. George likes gardening.

He has grown some sunflowers.



One sunflower grew to 69 cms.

His tallest one was 81 cms high.

How much taller was that? _____

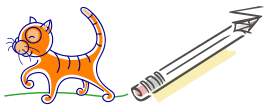
He planted 16 seeds.

A quarter of them died.

How many sunflowers did George manage to grow? _____

He watered them twice a day for 2 weeks.

How many times was that? _____



4. Now help Orange Cat finish these sums.

Put your answers in the orange boxes.

3 + 8 =	11 – 5 =	9 + 14 =	18 – 7 =
57 + 6 =	69 – 11 =	4 x 9 =	30 x 3 =
9 + 11 + 3 =	12 + 9 – 4 =	21 – 7 + 14 =	



Put the correct sign + – x ÷ in the box.

6 ☐ 3 = 2	11 ☐ 11 = 22	5 ☐ 0 = 0
1 ☐ 1 = 1	37 ☐ 14 = 23	10 ☐ 10 = 1

Find the missing numbers

$$\begin{array}{r} 3\,\square \\ 1\;7 \\ \hline 4\;9 \\ \hline \end{array} + \qquad \begin{array}{r} 4\;0 \\ 1\,\square \\ \hline 2\;4 \\ \hline \end{array} - \qquad \begin{array}{r} 5\;3 \\ 3 \\ \hline 1\,\square\,9 \\ \hline \end{array} \times \qquad \begin{array}{r} 3\;6 \\ \square \\ \hline 2\,\square\,6 \\ \hline \end{array} \times$$

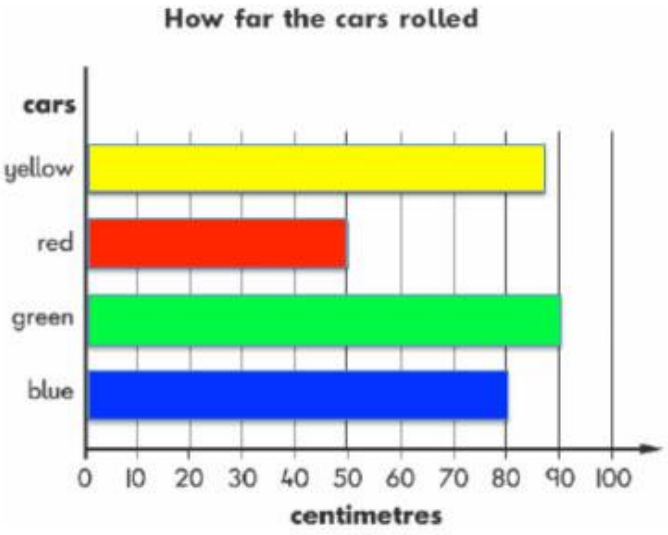
77, 66, ☐, 44, ☐, 22, 11, ☐

☐, ☐, 9, 27, 81, 243

1, 3, 6, 10, 15, ☐, 28, ☐, 45,



5.



Nishil rolled 4 cars down a slope to see how far they would go.

This bar chart shows how far each car rolled before it stopped.



How far did the green car roll? _____

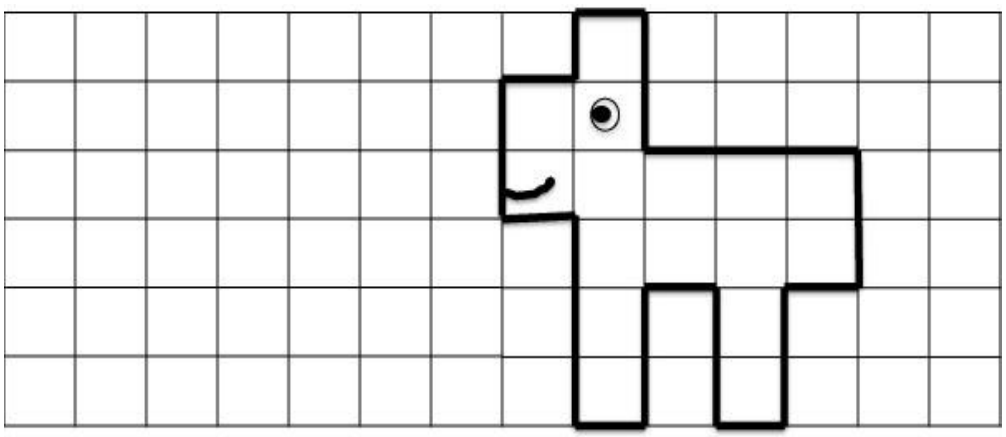
Estimate how far the yellow car rolled. _____

Why might the red car have stopped so soon? _____

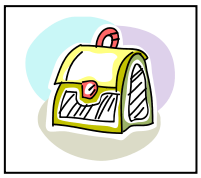
_____

How many metres are 100cms? _____

6. This is an OLOP. He needs a friend. Draw another OLOP exactly the same shape and size so that their noses touch.



7.



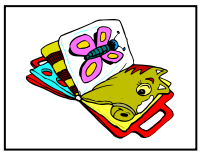
£1.40



65p



35p



10p
each

Anika went to her school fair with two £1.00 coins in her purse.

She wanted to buy the bag for herself and the train, teddy and a book for her small brother.

Could she do so? _____

What would the bag, the teddy and one book cost? _____

She decided to spend just one £1.00 coin. She bought the teddy. How many books could she buy? _____

In fact she bought the teddy and just one book.

How much did she spend? _____

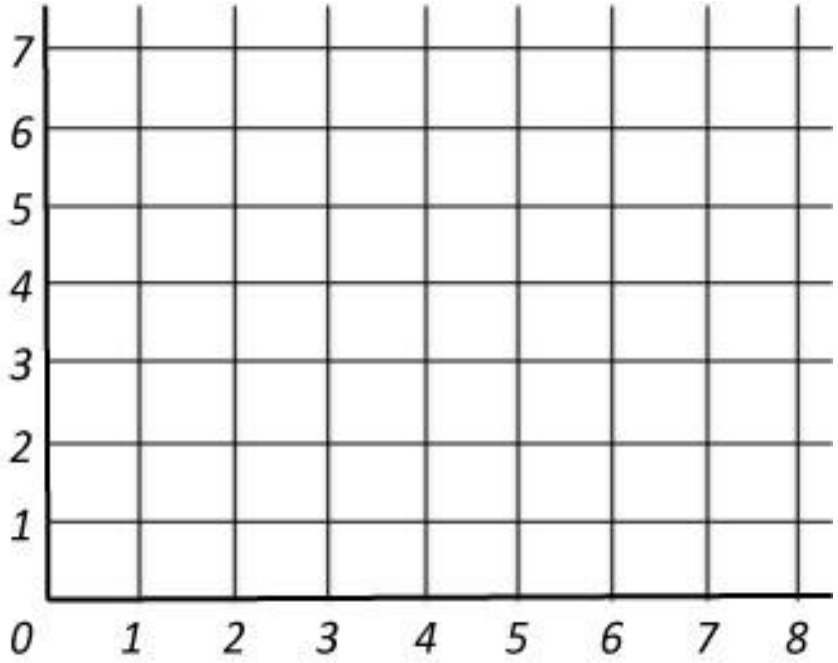
She was given two coins as change.
Write their values in the shapes below.

Suppose instead she had spent £1.20 on FOUR things.

Which four would she have bought? _____

_____

8.





↑

This is Ben's house.

Draw the front of his house by plotting the points below on the grid.

Plot each one and join it to the next.

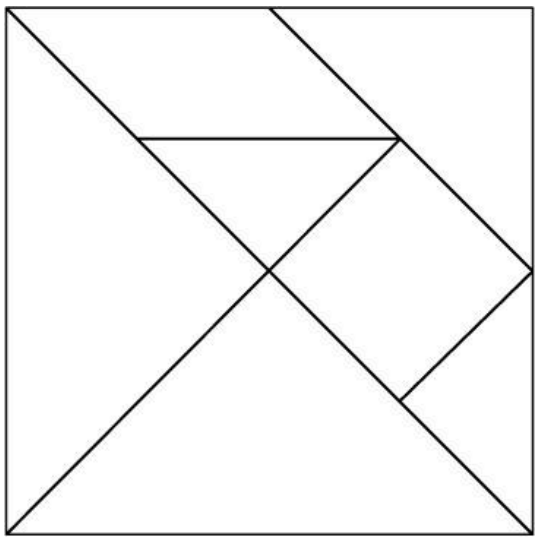
(1,0), (1,4), (0, 4), (4,7), (8,4), (7,4), (7,0)

Draw in Ben's door, choosing 4 points on the grid.

Write the co-ordinates of the points you have used.

(,), (,), (,), (,)

9.

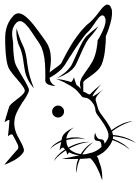


How many squares can you see?

_____

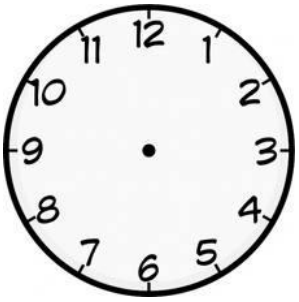
How many triangles can you see?

_____

10. 

White Rabbit is 30 minutes late for his 3.30 tea with Alice.

Draw hands on the clock face to show the time he arrived.

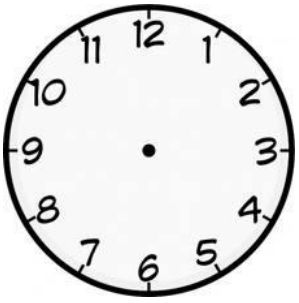


Mr Shah is 15 minutes late for his train.

It leaves the station at 8.15.

Draw hands on the clock face to show the time Mr Shah reached the station.



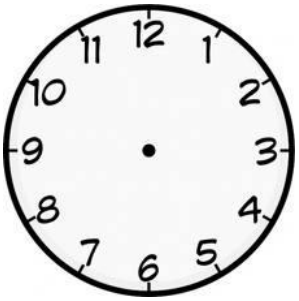




Mum's watch is 30 minutes fast.

It says 11.15

Draw hands to show the correct time.



Now write on the digital watches the times shown on these clock faces.



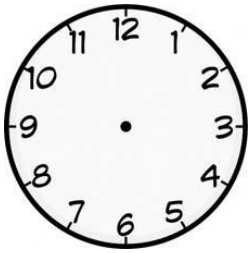








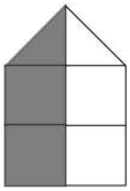
Draw on the clock face the time you go to bed.

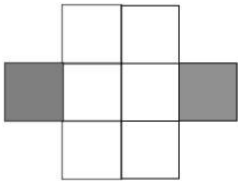


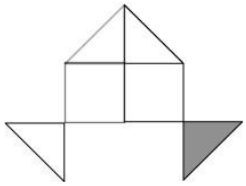
Time: _____

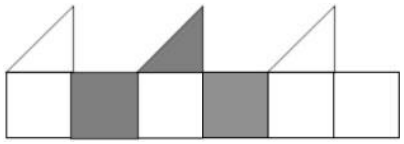
11. On the line underneath each shape write a fraction to show how much each is shaded.





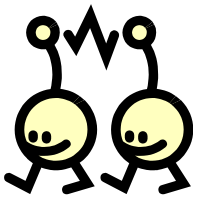






_____ _____ _____ _____

12.



These are GROGS. They live on a planet where the money used is *grugs* and *hexagrugs*.

6 *grugs* are worth 1 *hexagrug*.

Why do you think it is called a *hexagrug*? _____

_____

How many grugs is 2 hexagrugs + 3 grugs? _____

Change 26 grugs into hexagrugs and grugs. _____

A grog has 6 hexagrugs in his purse. What change would he be given if he spent 3 hexagrugs + 2 grugs? _____

