

National curriculum tests

Key Stage 2

Mathematics

Practice Paper 2-2: reasoning

First name						
Middle name						
Last name						
Date of birth	Day		Month		Year	
School name						
DfE number						

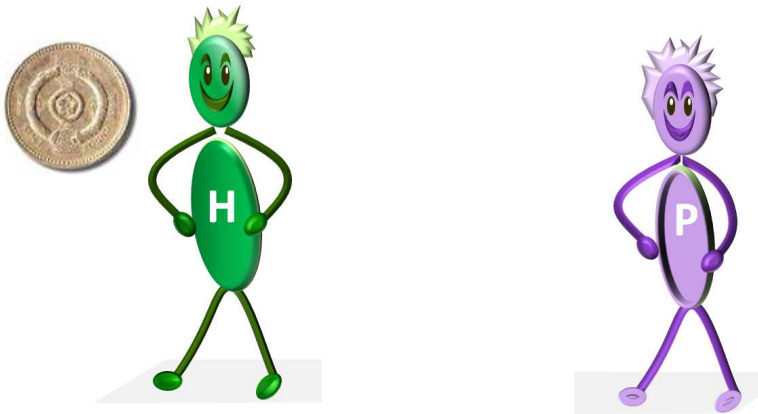
Time: 40 minutes.

No calculators allowed.

35 marks



1 Henry has £1, but Poppy has ten pence **less**.



How much does Poppy have.



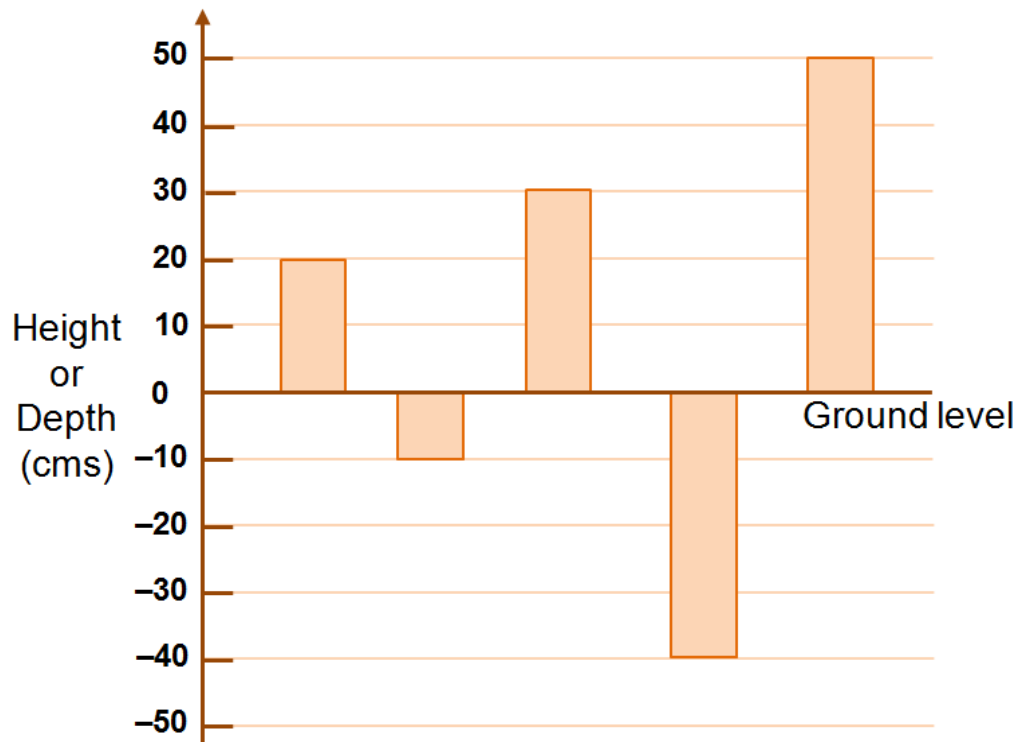
1 mark

Ref: 3N2a

3 Henry was at the beach building sand castles and digging holes



This graph show the height of a castle or the depth of a hole



What's the difference in height between the smallest and tallest castle

cm

1 mark

What the difference between the tallest castle and the deepest hole

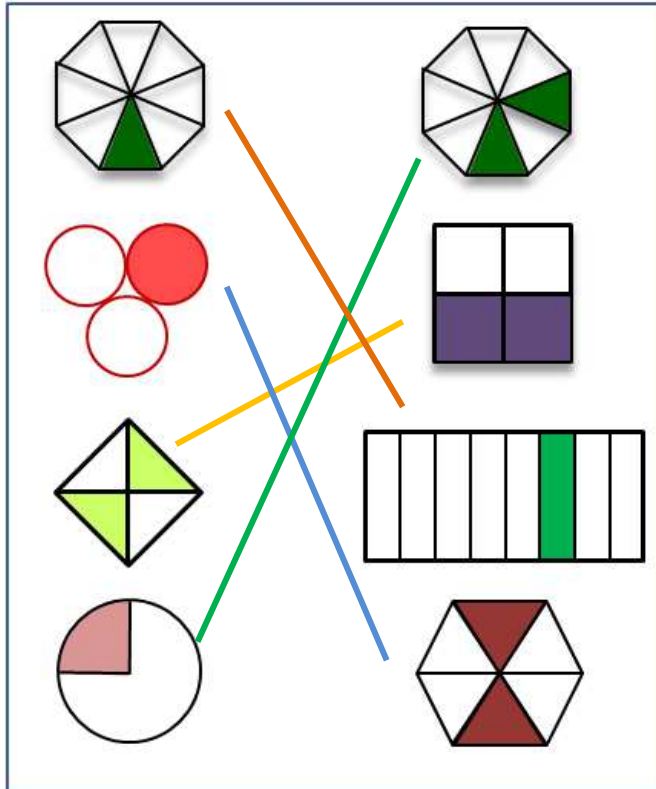
cm

1 mark

Ref: 4S1

4 Here are some shaded shapes.

Draw a line to match fractions



2 marks

Ref: 4F2

5

How many minutes are in $5 \frac{1}{2}$ hours?

minutes

1 mark

Ref: 4M4c

6

Henry and Poppy were chatting about their ages.

I am 9 years 2 months old



.. and I am 6 years 11 months old



What's the difference between their ages in years and months

years months

1 mark

Ref: 5M4

7

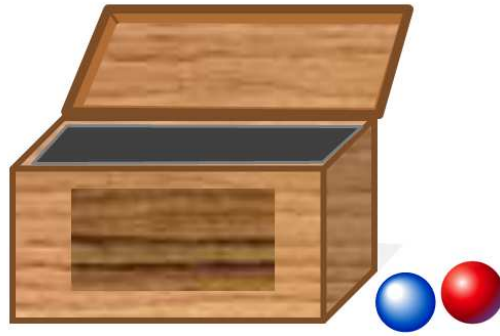
Colour crossing the grid using multiples of 7



1 mark

Ref: 5C5a

8 Poppy sells marbles in wooden boxes.



She uses this formula to work out how much to charge for one box of marbles.

$$\text{Cost} = \text{number of marbles} \times 30\text{p} + 50\text{p for the box}$$

How much is a box of 20 marbles?

£



1 mark

Jane buys a box of marbles for £5

Use the formula to calculate how many marbles are in the box

Show your Method

marbles

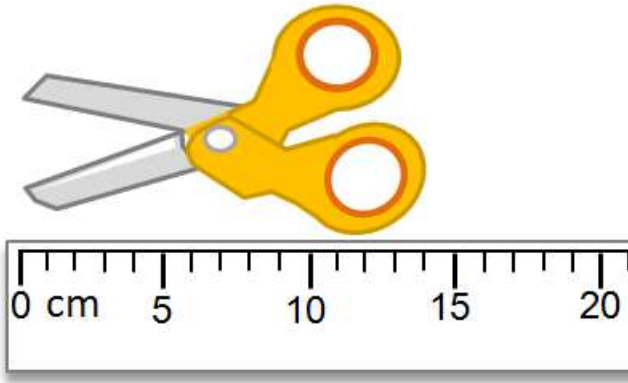


2 marks

Ref: 6A2

9

How long are the scissors (✓)



10cm

13cm

14cm

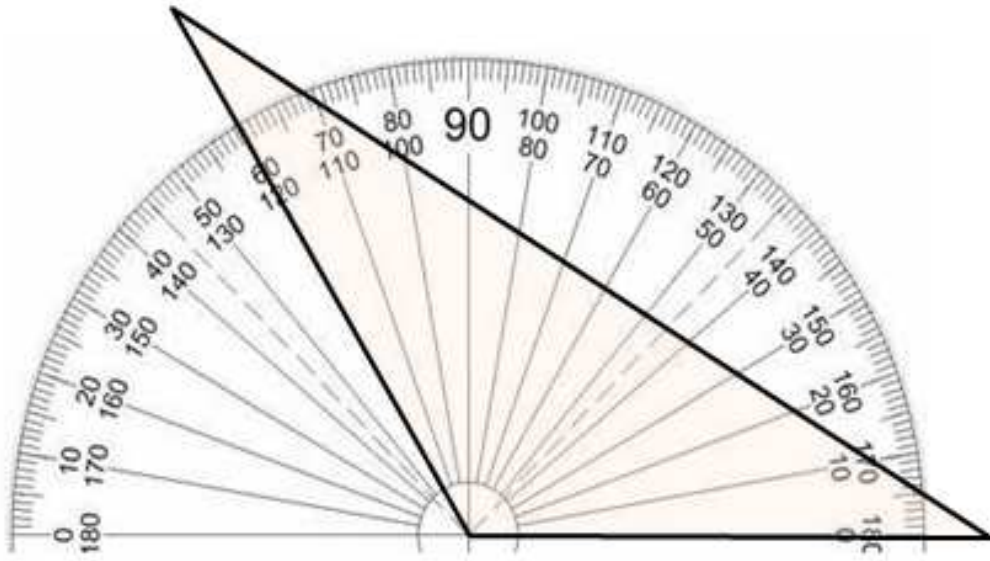
15cm



1 mark

Ref: 3M2a

10 Here is a triangle



How many degrees is the largest angle



1 mark

Ref: 5G4

11

Write the two missing digits to make this long multiplication correct

$$\begin{array}{r} \square 4 \\ \times 2 \square \\ \hline 1 2 \\ 6 0 \\ \hline 7 2 \end{array}$$

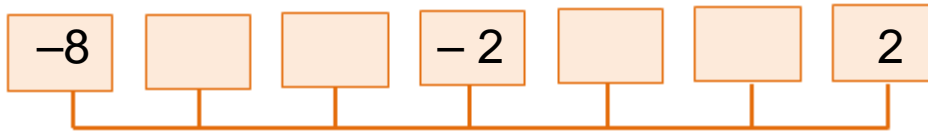


2 marks

Ref: 5C7a

12

Put the numbers on the number line.



0 -5 -6 -1



1 mark

Ref: 5N5

13

Henry measured the length of two worms.



The smallest was 0.012 m
The largest was 0.014 m

What was the difference in their lengths

m

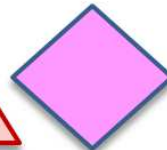
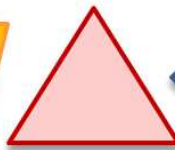
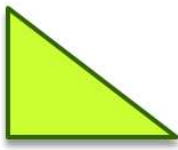
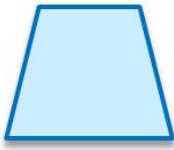


1 mark

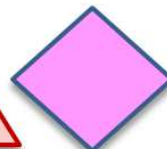
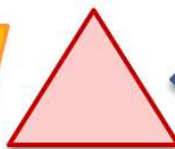
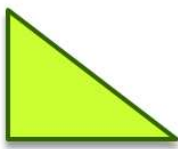
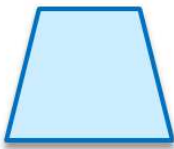
Ref: 5F10

14

Which shape has perpendicular sides (✓)



Which shapes have parallel sides (✓)



1 mark

1 mark

Ref: 3G2

15

Round 249, 646

to the nearest 10,000

to the nearest 1,000

to the nearest 100

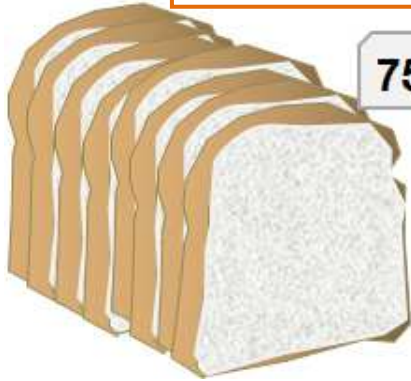


2 marks

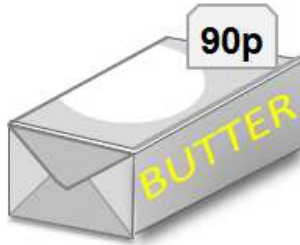
Ref: 5N4

17

For our picnic we bought some food



75p



90p



26p



We bought 2 loaves of bread,
1 pack of butter and 10 cakes

We will share the cost between 10 of us

How much will each of us pay?

Show
your
Method

p

2 marks

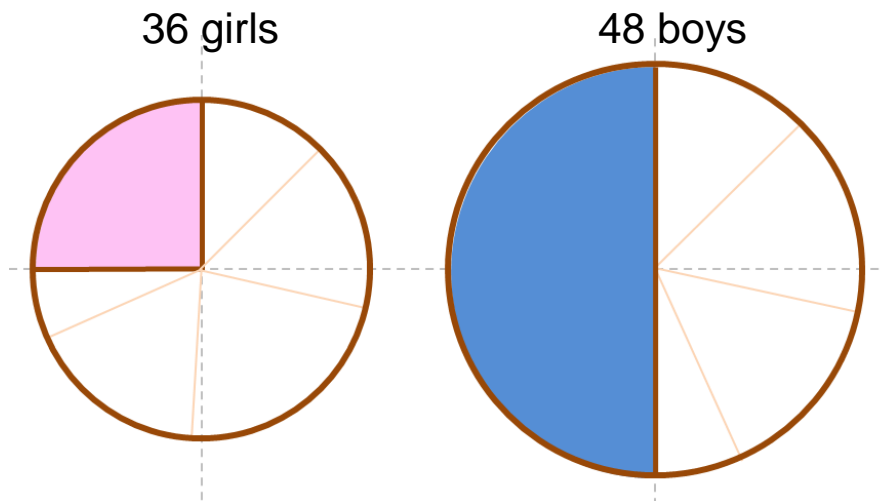
Ref: 6C8

19

Some boys and girls were asked what was their favourite colour.

These two pie charts show the results.

The girls favourite colour was pink, shown shaded
The boys favourite colour was blue, shown shaded



How many girls chose pink as their favourite

 girls

1 mark

How many boys chose blue as their favourite

 boys

1 mark

Ref: 6S1

21 Half a kilogram of silver costs £230.

What is the cost of one gram of silver?

Show
your
Method

A large grid for showing the method, with a small box labeled 'p' on the right side.



2 marks

Ref: 6F10