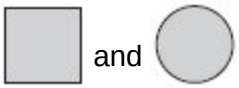
Downloaded from: www.satspapersguide.co.uk

Algebra KS2 SATS Standard Worksheet

1. What is the value of $4x + 7$ when $x = 5$?

1 mark

2.  and each stand for a different number.

 = 34



What is the value of ?

1 mark

3. ***n*** stands for a number.

Complete this table of values.

n	**5 *n* – 2**
20	
	38

2 marks

4. The rule for this sequence of numbers is **'add 3 each time'.**

1 4 7 10 13 16 …

The sequence continues in the same way.

Mary says,

> ***'No matter how far you go there will never be a multiple of 3 in the sequence' .***

Is she correct?

Circle Yes or No. **Yes / No**

Explain how you know.

Downloaded from: www.satspapersguide.co.uk

.....

.....

1 mark

5. k stands for a whole number.

k **+ 7** is greater than 100

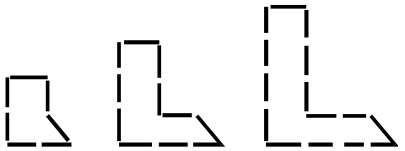
k **– 7** is less than 90

Find **all** the numbers that k could be.

_____

2 marks

6. Ann makes a pattern of **L** shapes with sticks.



Shape–number:	**1**	**2**	**3**
Number of sticks:	7	11	15

Ann says : ***"I find the number of sticks for a shape by first multiplying the shape-number by 4, then adding 3".***

Work out the **number** of sticks for the shape that has shape-number **10.**

1 mark

Ann uses **59 sticks** to make another **L** shape in this pattern.

What is its shape-number?

2 marks

Here is Ann's rule again:

"I find the number of sticks for a shape by first multiplying the shape-number by 4, then adding 3".

Write a formula to work out the number of sticks for any **L** shape.

Downloaded from: www.satspapersguide.co.uk

Use **S** for the number of **sticks** and **N** for the **shape-number.**

S =

2 marks

7. **p** and **q** each stand for whole numbers.

p + q = 1000

p is 150 **greater** than **q**.

Calculate the numbers **p** and **q**.

Show your **method.** You may get a mark.

p = **q =**

2 marks

8. n stands for number.

Match the equivalent expressions.

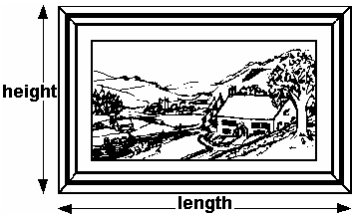
One has been done for you.

n plus 5	n + 5
2 less than n	n – 2
n plus n	2n
	n^2
	2 – n
	n + 2

2 marks

9. Here are some picture frame sizes.

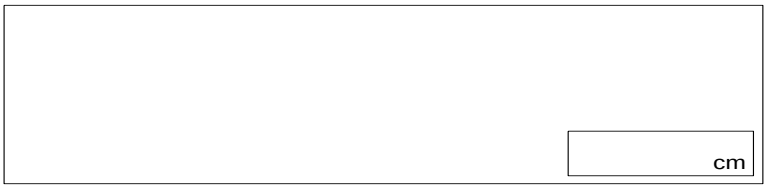
height in cm	10	12	14	16
length in cm	16	20	24	28



For each frame, the length is **twice** the height, **subtract 4.**

What is the **length** of a frame which has a **height** of **36cm**?

Downloaded from: www.satspapersguide.co.uk



2 marks

Downloaded from: www.satspapersguide.co.uk

For each frame, the length **(L)** is **twice** the height **(H)**, **subtract 4.**

Write this in symbols.

L =

2 marks

A **new** frame has its length **twice** its height.
It is made with 126cm of wood.

What is the **length** of this frame?

cm

2 marks