testbase

Number

Reasoning

Name: _____

Class: _____

Date: _____

Time:

Marks:

Comments:

Q1.

In this grid, there are four multiplications.

Write the **three** missing numbers.

4	×	8	=	☐
×		×		
3	×	☐	=	21
=		=		
☐		56		

1 mark

Q2.

In this sequence, the rule to get the next number is

> **Multiply by 2, and then add 3**

Write the missing numbers.

☐	25	53	☐

2 marks

Q3.

What number is 1,000 **less** than 9,072?

1 mark

Q4.

Write the missing digits to make this **addition** correct.

$$\boxed{}\,2\,\boxed{} + \boxed{}\,2 = 200$$

1 mark

Q5.

Write the missing number to make this **division** correct.

$$0.3 \div \boxed{} = 0.03$$

Q6.

Stefan completes this calculation.

	9	5
−	6	7
	2	8

Write an **addition** calculation he could use to check his answer.

	☐	☐
+	☐	☐
	☐	☐

Q7.

Write the correct symbol in each box to make the statements correct.

11×12 ☐ 15×10

$90 \div 30$ ☐ $60 \div 20$

$120 \div 4$ ☐ $160 \div 8$

30×8 ☐ 100×10

2 marks

Q8.

The numbers in this sequence **increase** by 45 each time.

Write the missing numbers.

☐ 155 200 245 ☐ ☐

2 marks

Q9.

The numbers in this sequence **decrease** by the same amount each time.

303,604   302,604   301,604   300,604   …

What is the next number in the sequence?

☐

1 mark

Q10.

Adam wants to use a mental method to calculate 182 − 97

He starts from 182

Here are some methods that Adam could use.

Tick the methods that are **correct**.

add 3 then subtract 90 ☐

subtract 100 then add 3 ☐

subtract 7 then subtract 90 ☐

subtract 3 then subtract 100 ☐

<div align="right">2 marks</div>

Q11.

Circle the number that is **10 times** greater than nine hundred and seven.

9,700　　　907　　　9,007　　　970　　　9,070

<div align="right">1 mark</div>

Q12.

Write the missing numbers to make this **multiplication** grid correct.

×	☐	☐
9	63	54
☐	56	48

<div align="right">1 mark</div>

Q13.

Write the three missing digits to make this **addition** correct.

$$\begin{array}{cccccc} & 5 & 3 & 2 & \boxed{} & 9 \\ + & & 7 & 4 & 2 & \boxed{} \\ \hline & \boxed{} & 0 & 6 & 7 & 6 \end{array}$$

2 marks

Q14.

Complete this table with the missing numbers.

One row has been done for you.

Number	1,000 more
3,500	4,500
85	
	9,099
	15,250

2 marks

Q15.

$$33{,}630 = 354 \times 95$$

Use this multiplication to complete the calculations below.

$354 \times 9.5 = \boxed{}$

$3{,}540 \times 95 = \boxed{}$

$3{,}363 \div 95 = \boxed{}$

2 marks

Q16.

Layla wants to estimate the answer to this calculation.

$$3\frac{9}{10} - 2\frac{1}{8} + 1\frac{4}{5}$$

Tick the calculation below that is the best estimate.

Tick one

3 − 2 + 2 ☐

4 − 2 + 1 ☐

4 − 2 + 2 ☐

3 − 2 + 1 ☐

1 mark

Q17.

Write the missing number to make this **division** correct.

75 ÷ ☐ = 7.5

1 mark

Q18.

A group of friends earns £80 by washing cars.

They share the money **equally**.

They get £16 each.

How many friends are in the group?

☐

1 mark

Q19.

The children at Farmfield School are collecting money for charity.

Their target is to collect £360

So far they have collected £57.73

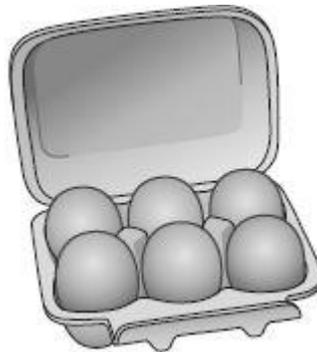How much **more** money do they need to reach their target?

£ _____

1 mark

Q20.

A farmer is packing eggs.

Each box holds **six** eggs.

The farmer has 980 eggs to pack.

How many boxes can the farmer **fill** using 980 eggs?

_____ full boxes

1 mark

How many eggs will be left over?

_____ left over

1 mark

Q21.

The **original** price of this car is £8,999

Sale
£1,100 off

What is the **sale** price of the car?

£

1 mark

Q22.

Write the missing number.
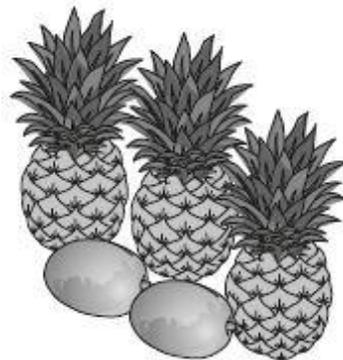
$$6 + 2 \times 2 - \boxed{} = 6$$

1 mark

Q23.

3 pineapples cost the same as 2 mangoes.

One mango costs £1.35

How much does **one** pineapple cost?

£

2 marks

Q24.

A box contains trays of melons.

There are 15 melons in a tray.

There are 3 trays in a box.

A supermarket sells **40** boxes of melons.

How many melons does the supermarket sell?

melons

2 marks

Q25.

There are 2,400 leaflets in a box.

William and Ally take 450 leaflets each.

Adam and Chen share the rest of the leaflets equally.

How many leaflets does Adam get?

Show
your
method

2 marks

Q26.

Amina posts three large letters.

The postage costs the same for each letter.

She pays with a £ 20 note.

Her change is £14.96

What is the cost of posting **one** letter?

Show your method

£

2 marks

Q27.

Ken is playing a game. He has 4,289 points.

Then he scores another 355 points.

Ken's target is 6,000 points.

How many **more** points does Ken need to reach his target?

Show your method

2 marks

Q28.

Ally and Jack buy some stickers.

Pack of 12 stickers
£10.49

12 stickers
99p each

Ally buys a pack of 12 stickers for £10.49

Jack buys 12 single stickers for 99p each.

How much more does Jack pay than Ally?

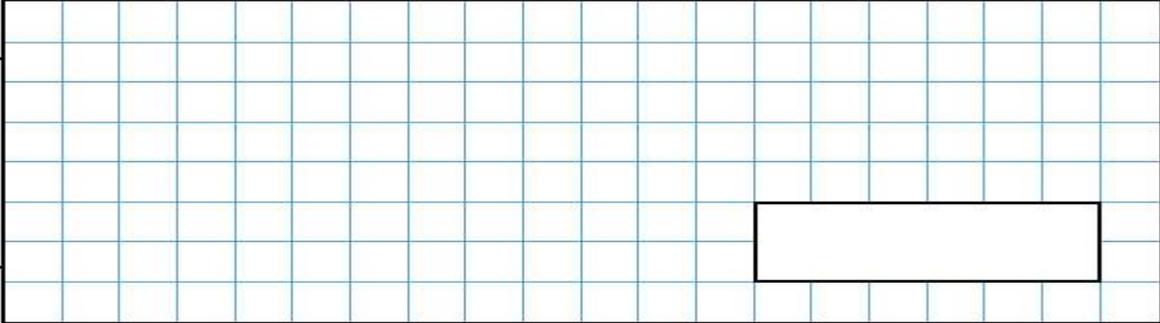Show your method

£

2 marks

Q29.

At the start of June, there were 1,793 toy cars in the shop.

During June,

- 8,728 more toy cars were delivered

- 9,473 toy cars were sold.

How many toy cars were left in the shop at the end of June?
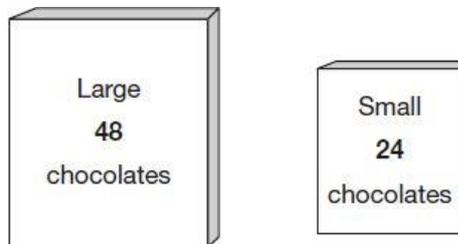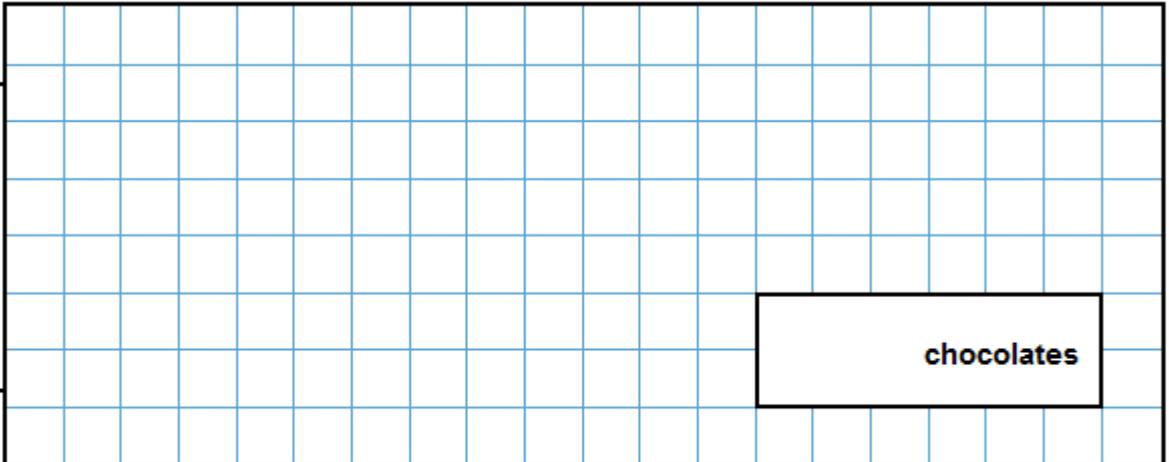
Show your method

2 marks

Q30.

Ken buys 3 large boxes and 2 small boxes of chocolates.

Each large box has 48 chocolates. Each small box has 24 chocolates.
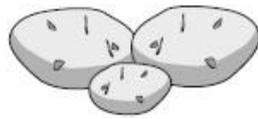
Large
48
chocolates

Small
24
chocolates

How many **chocolates** did Ken buy altogether?

Show your method

chocolates

2 marks

Q31.

Adam is making booklets.

Each booklet must have **34** sheets of paper.

He has **2** packets of paper.

There are **500** sheets of paper in each packet.

How many complete booklets can Adam make from **2** packets of paper?

Show your method

booklets

2 marks

Q32.

Layla makes jewellery to sell at a school fair.

Each bracelet has **53** beads.

She makes **68** bracelets.

Each necklace has **105** beads.

She makes **34** necklaces.

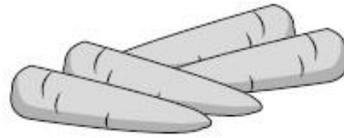How many beads does Layla use **altogether?**

Show your method

beads

3 marks

Q33.

potatoes
£1.50 per kg

carrots
£1.80 per kg

Jack buys $1\frac{1}{2}$ kg of potatoes and $\frac{1}{2}$ kg of carrots.

How much **change** does he get from **£5**?

Show your method

£

2 marks

Q34.

John buys one toy car and one pack of stickers.

£1.49   **£1.64**

He pays with a **£10** note.

How much change does John get?

Show your method

£

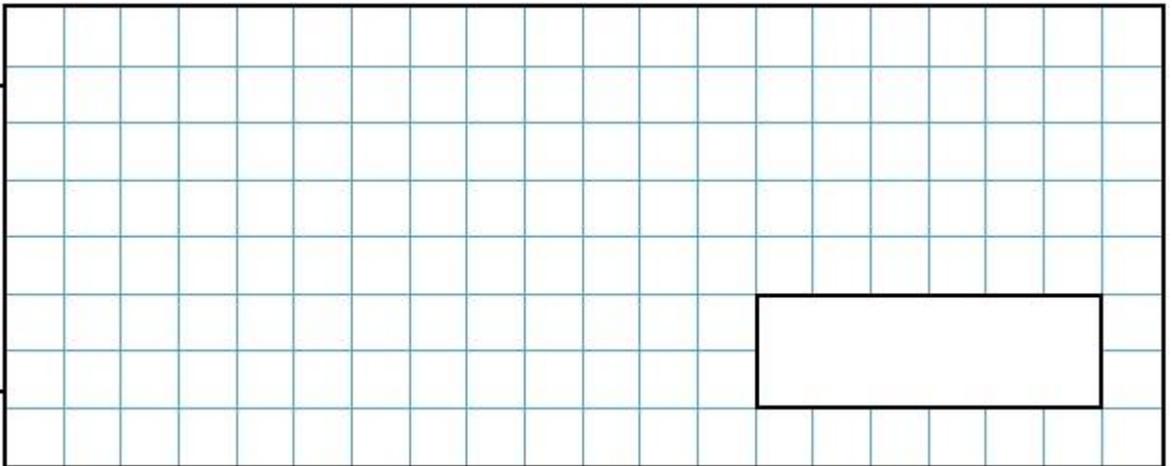2 marks

Q35.

Jack chose a number.

He multiplied the number by 7

Then he added 85

His answer was 953

What number did Jack choose?

Show your method

2 marks