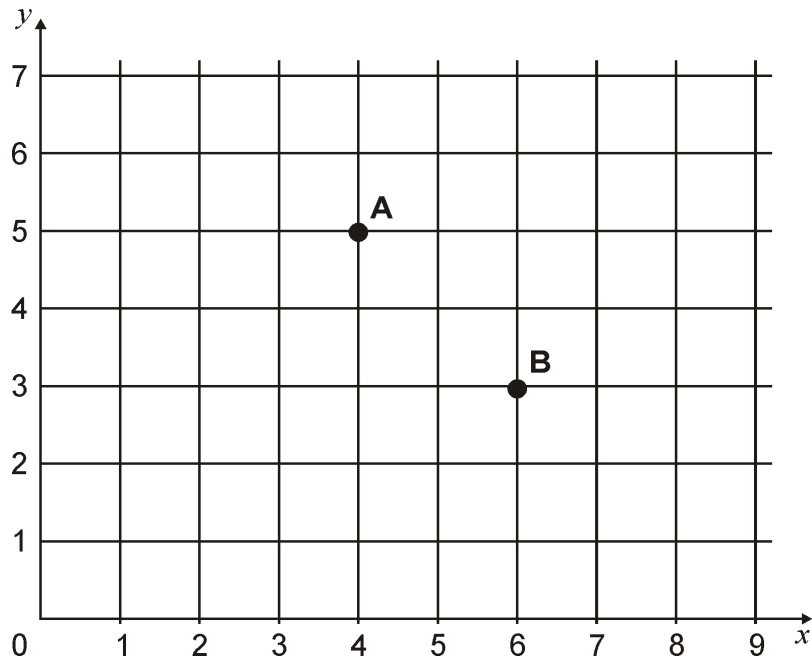


1.

**A**, **B**, **C** and **D** are the vertices of a rectangle.

**A** and **B** are shown on the grid.

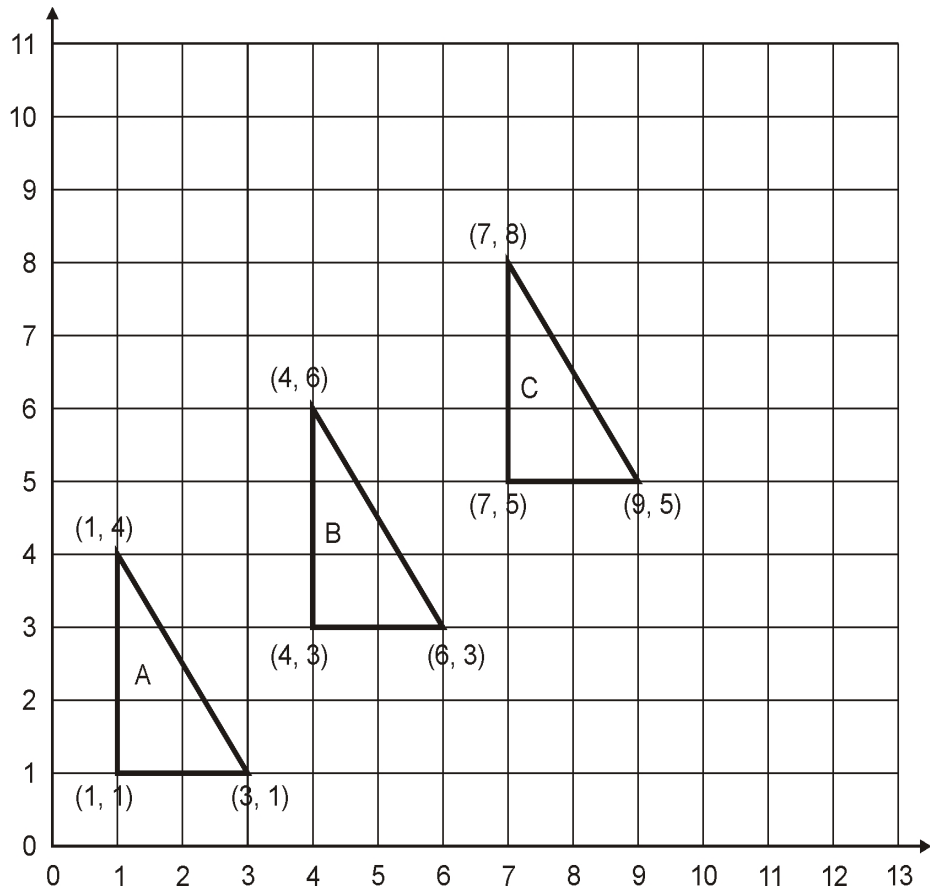


**D** is the point (3, 4)

Write the coordinates of point **C**.

1 mark

2.

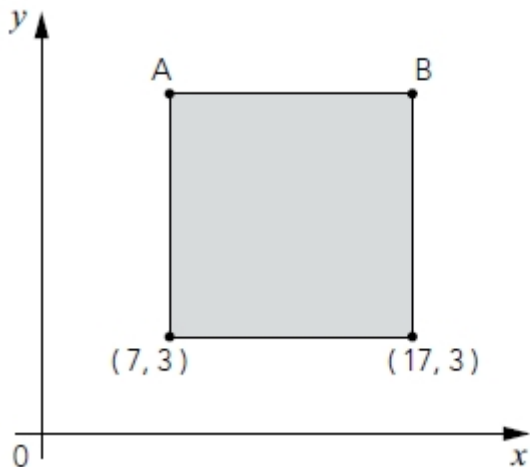


Write the co-ordinates of the next triangle in the sequence.

1 mark

3.

The shaded shape is a **square**.



Not drawn accurately

What are the coordinates of A and B?

A is

1 mark

B is

1 mark

4.

Here is the calendar for August 1998.

### August 1998

Sun	Mon	Tues	Wed	Thur	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

Simon's birthday is on **August 20th**.

In 1998 he had a party on the **Sunday after** his birthday.

What was the **date** of his party?

1 mark

Tina's birthday is on **September 9th**.

On what **day of the week** was her birthday in 1998?

1 mark

**5.**

Here is part of the bus timetable from Riverdale to Mott Haven.

Riverdale	10:02	10:12	10:31	10:48
Kingsbridge	10:11	10:21	10:38	10:55
Fordham	10:28	10:38	10:54	11:11
Tremont	10:36	10:44	11:00	11:17
Mott Haven	10:53	11:01	11:17	11:34

How many minutes does it take the 10:31 bus from Riverdale to reach Mott Haven?

1 mark

Mr Evans is at Fordham at 10:30

What is the **earliest** time he can reach Tremont on the bus?

1 mark

6.

William wants to travel to Paris by train.

He needs to arrive in Paris by **5:30 pm**.

Circle the **latest time** that William can leave London.

Leaves London	Arrives Paris
12:01	15:22
12:25	15:56
13:31	16:53
14:01	17:26
14:31	17:53
15:31	18:53
16:01	19:20

1 mark

7.

Round **124,531**

to the nearest 10,000

to the nearest 1,000

to the nearest 100

2 marks



9.

Draw arrows.

rounded to the nearest 100 is



1070

3700

8200

8225

3600

1100

3680

8300

1000

1 mark

10.

Here are five numbers.

~~2~~ 3 4 5 6

Write each number on the correct cards.

The number 2 has been written on the correct cards for you.

<p>Prime numbers</p> <p>2</p>	<p>Factors of 12</p> <p>2</p>	<p>Factors of 15</p>
-------------------------------	-------------------------------	----------------------

2 marks

11.

Complete this sentence.

Every number with a factor of **10** must also have factors of

and  and

1 mark

12.

Write all the factors of 30 which are **also** factors of 20

---

2 marks



13.

Amir says,

*'All numbers that end in a 4 are multiples of 4.'*



Is he correct?

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

Yes / No

Explain how you know.

A large, empty, cloud-shaped outline intended for the student to write their explanation.

1 mark

14.

Circle the **two** prime numbers.

29

39

49

59

69

1 mark

15.

Seven children measured their heights.

Children	Height (cm)
Stefan	144
Lara	136
Olivia	142
Chen	143
Maria	152
Dev	148
Sarah	150

What is the mean height of the children?

Show your method

cm

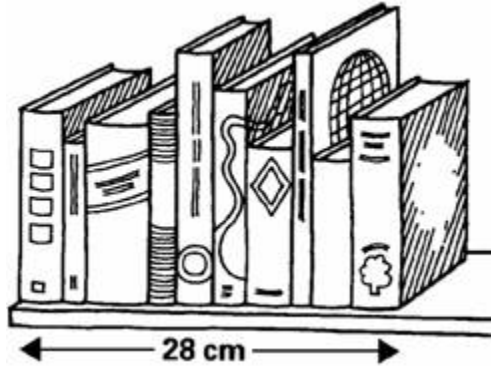
2 marks



17.

Vicki puts 10 books on a shelf.

The **10 books** take up **28 centimetres**.



What is the **mean (average)** thickness of her books?

Show your method

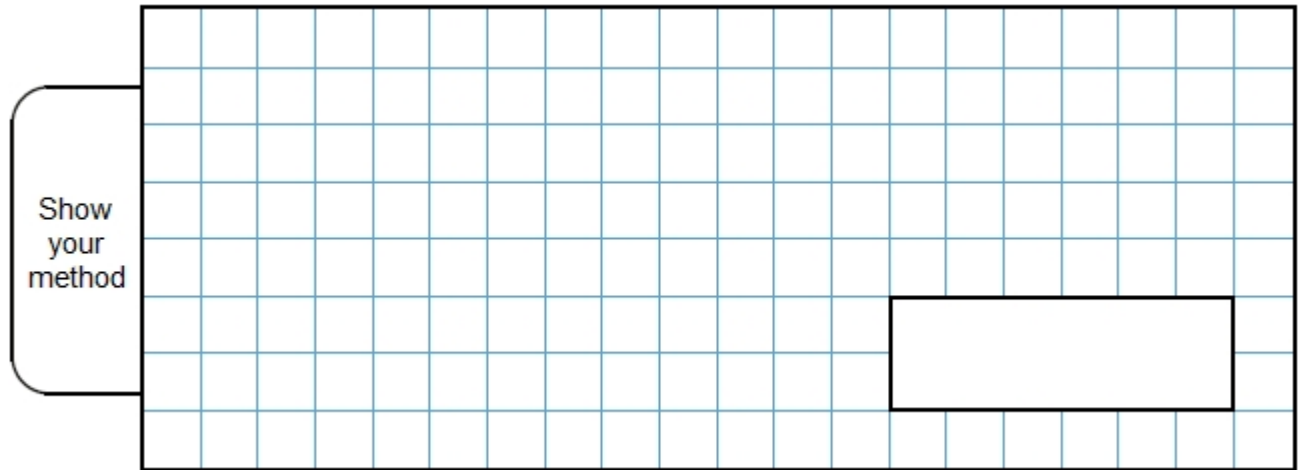
A grid for showing the method to find the mean thickness of the books. A small box on the right contains the unit 'cm'.

2 marks

The shelf is **120 centimetres** long.

Vicki fills the shelf with a mixture of books like the **first ten books**.

Estimate how many books she can get on the **120 cm shelf**.



2 marks

18.

Dev says,

I had £10  
I gave some money away.



Which expression shows how much money Dev has left?

$a$  is the amount of money, in pounds, that Dev gave away.

Tick **one**.

$10 + a$

$10 \div a$

$a - 10$

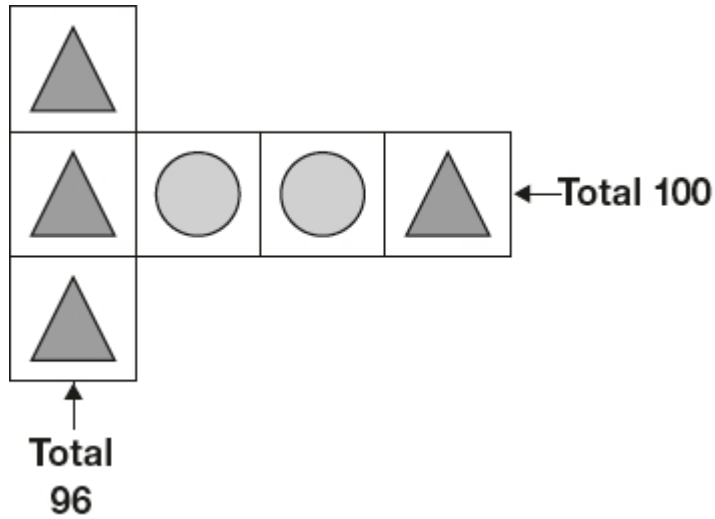
$10 - a$

$a \times 10$

1 mark

19.

Each shape stands for a number.



Work out the **value** of each shape.

▲ = \_\_\_\_\_

● = \_\_\_\_\_

1 mark

1 mark

20.

A shop sells fruit.

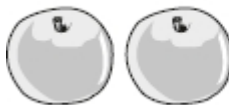
Chen buys 2 apples and 3 bananas.

He pays £2.35



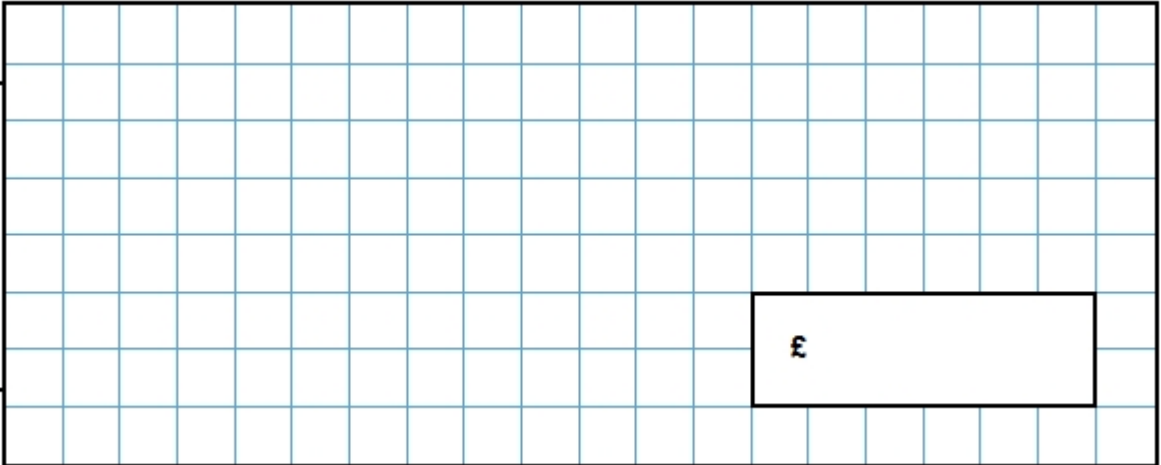
Megan buys 2 apples and 1 banana.

She pays £1.25



How much does **one** banana cost?

Show your method



£

2 marks

21.

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

1 mark



**22.**

A theme park sells tickets online.

Each ticket costs £24

There is a £3 charge for buying tickets.

Which of these shows how to calculate the total cost, in pounds?

Tick **one**.

number of tickets  $\times$  3 + 24

number of tickets  $\times$  24 + 3

number of tickets + 3  $\times$  24

number of tickets + 24  $\times$  3

1 mark

## Mark schemes

- 1.** (5, 2)  
*Coordinates must be written in the correct order.*  
*Accept unambiguous answers written on the diagram.* [1]
- 2.** (10, 7) (12, 7) (10, 10)  
*All correct, in any order for 1 mark.* [1]
- 3.** Indicates correct coordinates for both points, ie A as (7, 13) and B as (17, 13) 2  
*or*  
Indicates correct coordinates for one point  
*or*  
Transposes the responses, ie A as (17, 13) and B as (7, 13)  
*or*  
The only error is to indicate incorrect, but consistent, y ordinates, provided  $y > 3$   
eg  
• A as (7, 12) and B as (17, 12) 1  
U2 [2]
- 4.** (a) 23rd of August **OR** 23.8.98  
*Accept 23rd **OR** 23 **OR** unambiguous circling of the correct date on the calendar.* 1
- (b) Wednesday  
*Accept Wed **OR** recognisable misspellings of Wednesday **OR** Wednesday ringed.* 1 [2]

5.

(a) 46

*The answer is a time interval.*

1

(b) 10:44

*The answer is a specific time.*

1

[2]

6.

The correct time circled as shown:

Leaves London	Arrives Paris
12:01	15:22
12:25	15:56
13:31	16:53
14:01	17:26
14:31	17:53
15:31	18:53
16:01	19:20

*Accept alternative unambiguous positive indications, e.g. 14:01 ticked or underlined.*

*Accept 17:26 circled in addition to 14:01, provided no other time is circled.*

**Do not** accept only the arrival time 17:26 circled.

[1]

7.

Award **TWO** marks for all three numbers correctly rounded:

120,000

125,000

124,500

If the answer is incorrect, award **ONE** mark for any two numbers correctly rounded.

Up to 2

[2]

8.

(a) £200

1

(b) Award **TWO** marks for the correct answer of 37p **OR** £0.37

**OR**

for finding the correct difference between £199.63 and the answer given for 13a

*Answer to (a) must be a multiple of £10 for the award of **TWO** follow-through marks.*

If the answer is incorrect, award **ONE** mark for evidence of appropriate method, eg

$$74.68 + 65.90 + 59.05 = 199.63$$

$$200 - 199.63$$

**OR**

for evidence of an appropriate method to find the correct difference between £199.63 and the answer given for (a).

*Answer need not be obtained for the award of **ONE** mark.*

*Accept for **ONE** mark £37p **OR** 0.37p **OR** £37 as evidence of appropriate method.*

Up to 2

[3]

9.

1070 → 1100

8225 → 8200

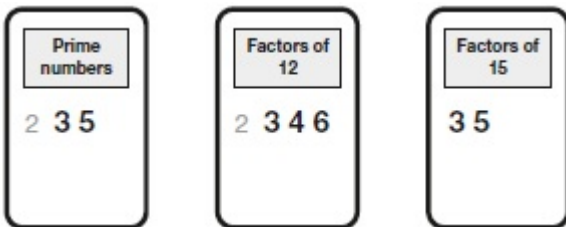
3680 → 3700

*All correct for **1** mark.*

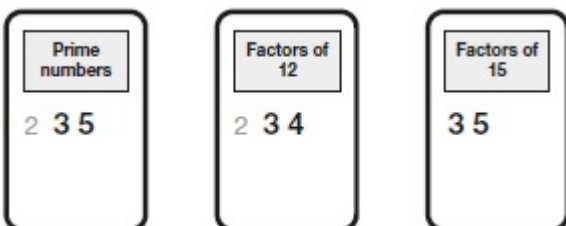
[1]

10.

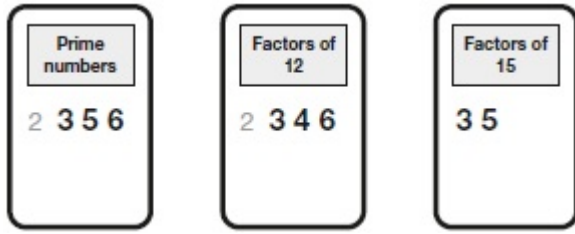
Award **TWO** marks for all four given numbers placed completely correctly 7 times, as shown:



If the answer is incorrect, award **ONE** mark for three of the given numbers all placed completely correctly, e.g.



OR



OR



*Accept the numbers in any order.*

*Ignore any additional numbers not given in the question.*

Up to 2m

[2]

11.

1, 2 and 5

*Numbers may be given in any order.*

[1]

12.

Award **TWO** marks for all four factors, as shown:

1, 2, 5, 10

If the answer is incorrect, award **ONE** mark for:

- three factors correct and none incorrect

OR

- four factors correct and one incorrect.

*Accept factors written in any order.*

*All four factors and no incorrect numbers must be given for the award of **TWO** marks.*

Up to 2

[2]

13.

An explanation which gives a counter-example to illustrate that not all numbers ending in 4 are multiples of 4, eg:

- '14 is not a multiple of 4'
- '4, 24 and 44 are multiples of 4, but not 14 and 34'
- '14 or 34 don't work'
- '54'

OR

an explanation which recognises that only numbers ending in 4 which have an even number of tens are multiples of 4, eg:

- 'It has to have an even number of 10s as well, like 20 or 40'
- '14, 24, 34, 44, 54, 64 – only half of them are'
- '4 doesn't go into 10 so 14 isn't'.

*No mark is awarded for circling 'No' alone.*

*Do not accept vague or incomplete explanations, eg:*

- 'Some numbers end in a 4 but aren't multiples of 4'
- '16 doesn't end in 4'
- 'Not all multiples of 4 end in 4'
- '24 is a multiple of 4 but the next one isn't'
- '4, 8, 12, 16, 20, 24 etc'.

*If 'Yes' is circled but a correct, unambiguous explanation is given, then award the mark.*

U1

[1]

14.

Two numbers circled as shown:

29 39 49 59 69

*Do not award the mark if additional incorrect numbers are circled.*

*Accept alternative unambiguous indications, eg numbers ticked, crossed or underlined.*

[1]

**15.**Award **TWO** marks for the correct answer of 145If the answer is incorrect, award **ONE** mark for evidence of an appropriate method, e.g:

- 144  
136  
142  
143  
152  
148  

---

+ 150  
1015

$1015 \div 7$

*Answer need not be obtained for the award of **ONE** mark.*

Up to 2

**[2]****16.**Award **TWO** marks for the correct answer of £5.50If the answer is incorrect, award **ONE** mark for:

- sight of  $22 \div 4$

**OR**

- evidence of appropriate method, e.g.
  - 3 tickets cost  $3 \times £5 = £15$   
1 ticket costs £7  
 $£15 + £7 = £22$   
 $£22 \div 2 \div 2$

*For **ONE** mark, accept an answer of £550, £550p or £5.5 as evidence of appropriate method.**Answer need not be obtained for the award of **ONE** mark.*

Up to 2m

**[2]****17.**(a) Award **TWO** marks for correct answer of 2.8 cm.If answer is incorrect, award **ONE** mark for any appropriate calculation even if the answer is incorrect, eg:

- $28 \div 10 =$  wrong answer.

*A calculation **MUST** be performed for award of one mark.*

Up to 2

(b) Award **TWO** marks for WHOLE NUMBER ANSWER in the range 40 to 50 inclusive, eg:

- 42.8

If answer is outside range, award **ONE** mark for an appropriate calculation, eg:

- $120 \div 28 \times 10 =$  wrong whole number answer.
- $120 \div 30 \times 10 =$  wrong whole number answer.
- 30cm is 10 books.  
60cm is 20 books.  
120cm is ... wrong answer.

*If answer is outside range, a calculation **MUST** be performed for award of one mark. If calculation is based upon incorrect answer to 16a, award **TWO** marks for correct calculation using an appropriate strategy **AND** rounding of answer to whole number, even if outside range 40–50, eg:*

- $120 \div$  answer to 16a = rounded whole number.  
OR  
ONE mark if there is either an error in calculation or failure to round to whole number.

Up to 2

[4]

18.

Award **ONE** mark for the correct box ticked, as shown:

Tick **one**.

$10 + a$

$10 \div a$

$a - 10$

$10 - a$

$a \times 10$

*Accept alternative unambiguous positive indication of the correct answer, e.g. Y.*

[1]



19.

(a)  $\blacktriangle = 32$

1

(b)  $\bullet = 18$

If the answers to  $\bullet$  and  $\blacktriangle$  are incorrect, award **ONE** mark if  $\blacktriangle + \bullet = 50$  unless  $\bullet = 25$

1

[2]

20.

Award **TWO** marks for the correct answer of 55p **OR** £0.55

If the answer is incorrect, award **ONE** mark for evidence of appropriate working, eg

■  $£2.35 - £1.25 = £1.10$

$£1.10 \div 2 =$  wrong answer

Accept for **ONE** mark £55 **OR** £55p **OR** 0.55p as evidence of appropriate working.

Working must be carried through to reach an answer for the award of **ONE** mark.

Up to 2  
U1

[2]

21.

27

[1]

22.

Second box only ticked correctly, as shown:

number of tickets  $\times 3 + 24$

number of tickets  $\times 24 + 3$

number of tickets  $+ 3 \times 24$

number of tickets  $+ 24 \times 3$

Accept alternative unambiguous positive indication of the correct answer, e.g. Y.

[1]