

## Instructions

You **may not** use a calculator to answer any questions in this test.

### Questions and answers

You have **40 minutes** to complete this test.

Follow the instructions for each question.

Work as quickly and as carefully as you can.

If you need to do working out, you can use the space around the question.

**Some questions have a method box like this:**

The diagram shows a large grid of 20 columns and 10 rows. On the left side, there is a rounded rectangle that spans 2 columns and 6 rows, containing the text "Show your method". In the bottom right corner of the grid, there is a smaller, empty rectangular box that is 4 columns wide and 2 rows high.

For these questions you may get a mark for showing your method.

If you cannot do one of the questions, **go to the next one.**

You can come back to it later, if you have time.

If you finish before the end, **go back and check your work.**

### Marks

The number under each line at the side of the page tells you the maximum number of marks for each question.

1

Circle the number that is between half a million and one million.

80 000

800 000

8 000 000

80 000 000

1 mark

2

The chart shows the distance in kilometres between some cities in Australia.

Alice Springs							
3012	Brisbane						
2324	1717	Cairns					
1511	3415	2727	Darwin				
2270	1674	3054	3781	Melbourne			
3630	4384	5954	4045	3452	Perth		
2644	996	2546	4000	868	4144	Sydney	

What is the distance between Brisbane and Darwin?

3415 km

1 mark

3 The rule for a number sequence is to **halve** each time.

Complete the number sequence.



1 mark

4 Write the numbers in the Carroll diagram.

One has been done for you.

~~16~~ 24 27 30 36

	multiple of 6	not a multiple of 6
square number	36	16
not a square number	24, 30	27

2 marks

**5**

The table shows the minimum temperatures in five different cities on one day.

Boston	7 °C
Chicago	-2 °C
Detroit	4 °C
Buffalo	-6 °C
Denver	-8 °C

The minimum temperature in Denver was 6 degrees colder than in Chicago.

Complete the table.

1 mark

**6**

Write the missing Roman numeral in the box to complete the sequence.

DXCVIII, DXCIX, , DCI

1 mark

- 7 The table shows the factors of a number, excluding 1 and itself.

Write the missing numbers in the table.

Number	Factors
8	2, 4
28	2, 4, 7, 14
40	2, 4, 5, 8, 10, 20

2 marks

- 8 Complete the calculation so that the answer is a multiple of 9

$$55 + \boxed{8} = \boxed{63}$$

1 mark

9

Write the fractions and decimal in order of size, starting with the smallest.

$$3\frac{3}{5} \quad \frac{15}{5} \quad 3.5 \quad \frac{17}{5}$$

$$\frac{15}{5}$$

smallest

$$\frac{17}{5}$$

$$3.5$$

$$3\frac{3}{5}$$

largest

1 mark

10

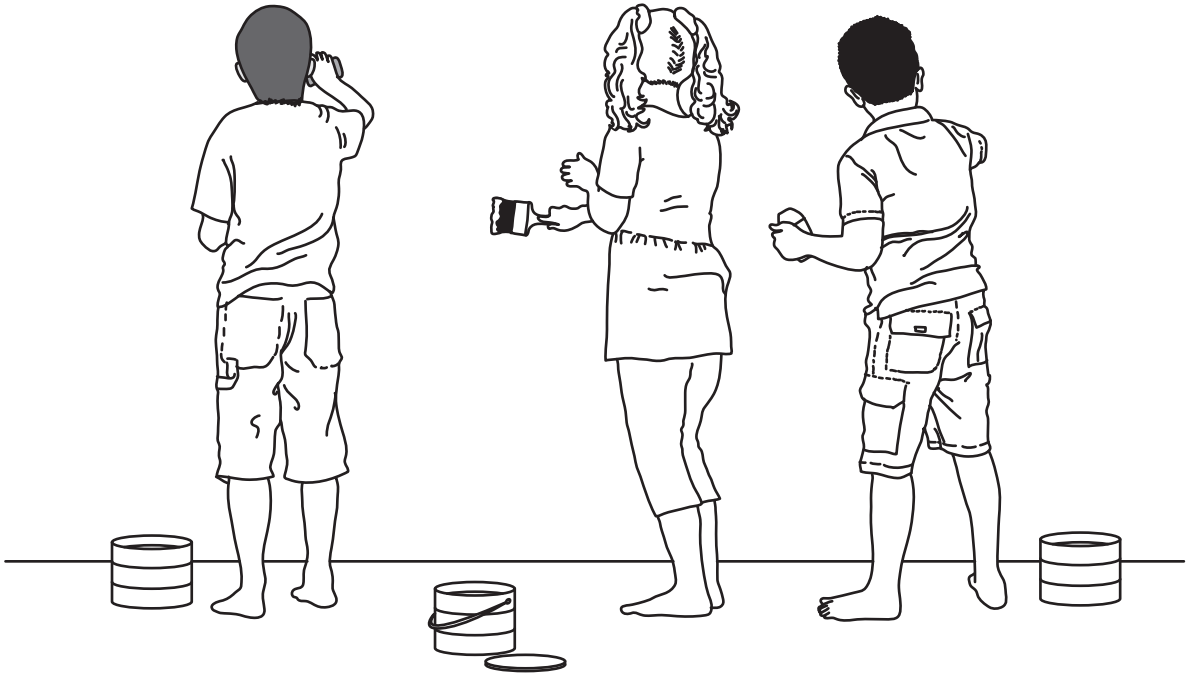
Write the **cube number** between 50 and 100

$$64$$

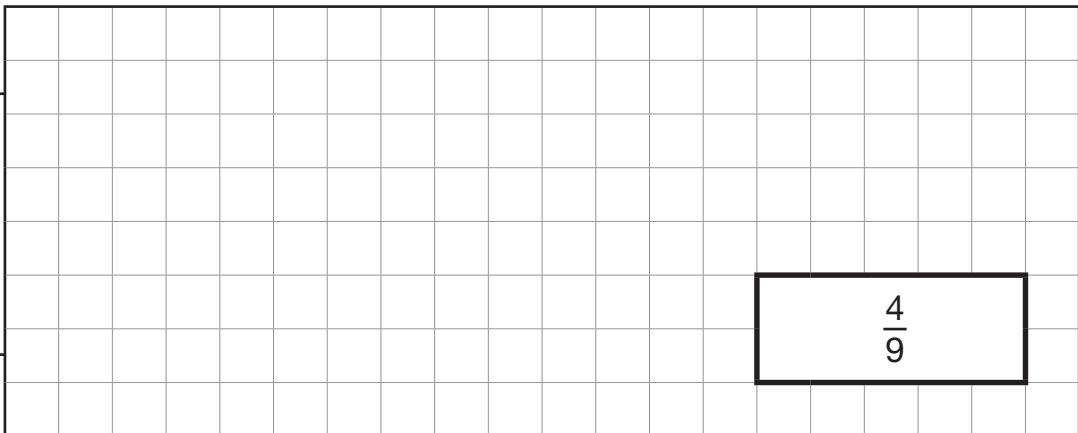
1 mark

11

Alicia, Kayden and Joe paint a wall for the school play.

Alicia paints  $\frac{2}{9}$  of the wall.Kayden paints  $\frac{1}{3}$  of the wall.

What fraction of the wall does Joe paint?

Show  
your  
method

2 marks



**12**

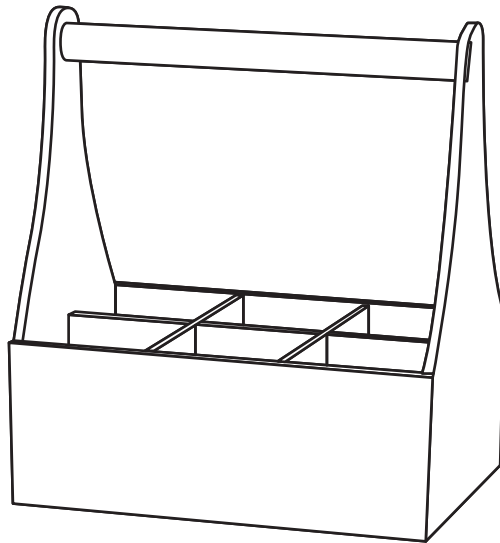
Write the missing number in the box.

$$13\ 401 + \boxed{36\ 599} = 50\ 000$$

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1 mark**13**

One crate holds 6 bottles.



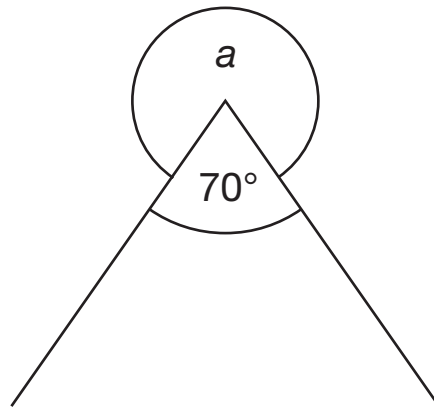
How many crates are needed to hold 204 bottles?

**34**

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1 mark

14

Calculate the size of angle  $a$ 

290

°

1 mark

Complete the table.

	type of angle
angle $a$	reflex
angle of $70^\circ$	acute

1 mark

15

Write 0.47 as a fraction.

 $\frac{47}{100}$ 

1 mark

**16**

A pond is approximately 3 feet deep.

Tick (✓) the measure that is approximately 3 feet in metric units.

9 cm 30 cm 90 cm 3 m 9 m 

1 mark

**17**

Complete the table.

The first row has been done for you.

	Less than $\frac{1}{2}$	Greater than $\frac{1}{2}$
$\frac{3}{4}$		✓
$\frac{11}{20}$		✓
$\frac{42}{100}$	✓	

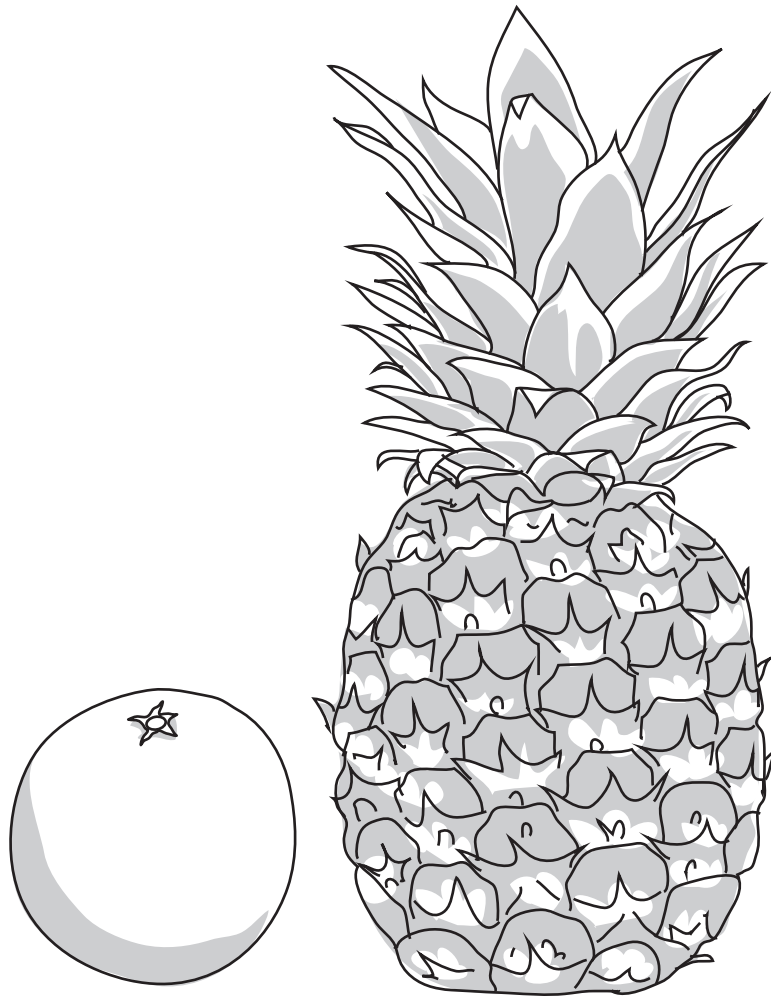
1 mark

18

The mass of an orange is 130 g

A pineapple is **8 times heavier**.

Give units with your answer.



Calculate the total mass of the orange and the pineapple.

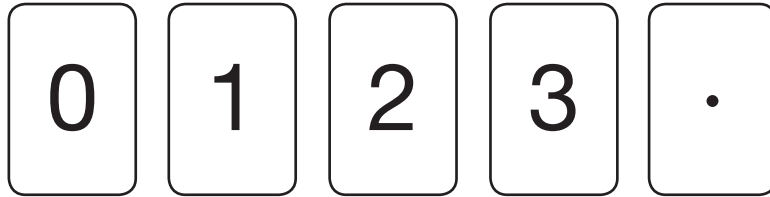
Show  
your  
method

1170 g  
or 1.170 kg

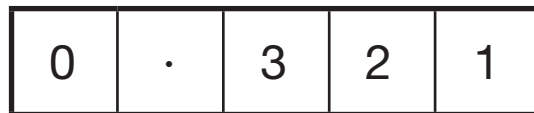
2 marks

19

Here are five cards.



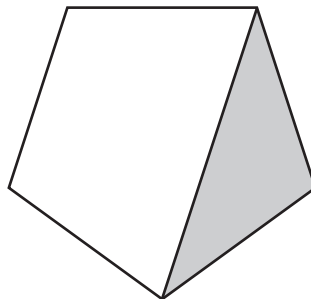
Use each card once to make the largest number less than 1



1 mark

20

A regular pentagon is cut to create a trapezium and a triangle.



Tick (✓) the type of triangle.

isosceles

equilateral

scalene



Explain your answer.

For example, the pentagon is regular and so two sides of the

triangle are equal.

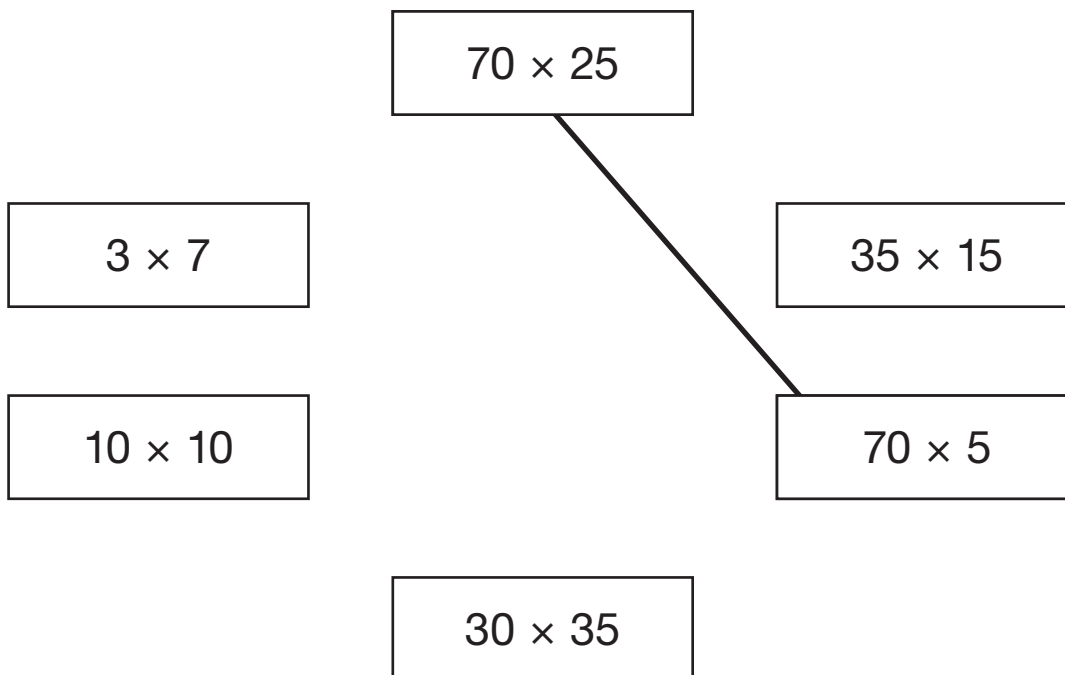
1 mark

21

Here is a number fact:

$$70 \times 30 = 2100$$

Draw a line to join **two** cards that have a total of 2100



1 mark

22

Here is a bus timetable for the town of Thriplow.

Bus timetable					
Station	0917	1107	1314	1515	1714
Park	0934	1124	1331	1552	1751
Market	1015	1205	1412	1613	1812
Library	1057	1247	1454	1655	1854
Airport	1137	1327	1534	1735	1934

Jake is at the park at a **quarter to eleven**.

What time does the next bus depart?

1124

1 mark

The bus takes 2 hours and 3 minutes to travel from the park to the airport.

Write this time in minutes.

123 minutes

1 mark

**23**

Here are six calculations.

Tick (✓) the calculation that gives the **largest** answer.

$703 - 99$    $5 \cdot 2 \times 104$

$1197 \div 3$    $5000 \div 504$

$604 + 97$    $32 \times 9$

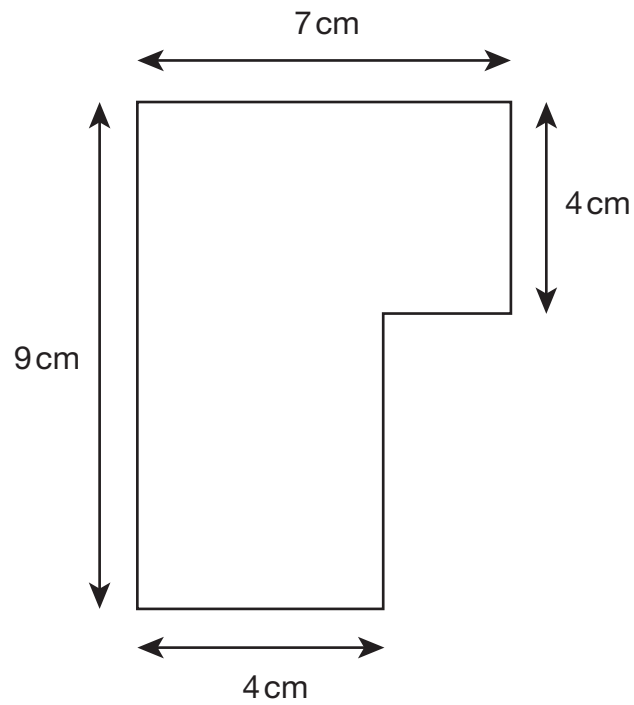
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1 mark



24

Find the perimeter of the shape.



Show  
your  
method

32 cm

2 marks

25

Francesca says:



Show that she is wrong, using an example.

For example,  $9 \times 7$  or 7 is a factor.

1 mark

26

The multiples of 5 are shaded on the 100 square.

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	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

What **percentage** of the numbers from 1 to 100 are multiples of 5?

20 %

1 mark

**27**

A piece of material measures 6.5 m by 1 m



How many 50 cm squares can be cut from the material?

Diagram showing a grid used for calculation. The grid is 20 units wide and 10 units high. A box labeled 'Show your method' is on the left. A box containing the number '26' is on the grid, representing the answer.

2 marks