



ANSWER BOOKLET

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FILL IN ALL THE INFORMATION REQUESTED CLEARLY AND LEGIBLY.

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TEST CODE

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SUBJECT MATHEMATICS 2022

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Please place your label here.

Please place your label here.

READ THE FOLLOWING
DIRECTIONS CAREFULLY.

1. This test is divided into **THREE** sections.
2. Make sure you read the instructions before you start to work on any section.
3. Write all your answers in this test booklet.
4. **DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.**

WRITE THE NAME OF YOUR SCHOOL BELOW.

WRITE YOUR FULL NAME BELOW.

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DATE OF BIRTH

<i>Day</i>	<i>Month</i>	<i>Year</i>

SEX

}	MALE	<input type="checkbox"/>
	FEMALE	<input type="checkbox"/>

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560

A014



**DO NOT
WRITE ON
THIS PAGE**

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Item	Mark			Initials
	Knowing	Applying	Reasoning	
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Instructions for the Mathematics Test

You are **NOT** allowed to use **calculators**.

This test has **THREE** sections with a total of 40 questions.

SECTION 1 has 20 questions (Nos. 1 to 20).

SECTION 2 has 16 questions (Nos. 21 to 36).

SECTION 3 has 4 questions (Nos. 37 to 40).

You have **75 minutes** for this test.

Answer **ALL** questions.

Read **EACH** question **CAREFULLY** before answering it.

Show **ALL** working in the spaces provided.

Marks will be given for correct steps shown.

Work carefully but do **NOT** spend too much time on any one question.

DO NOT BEGIN UNTIL YOU ARE TOLD TO DO SO.

SECTION 1

1. Write the numeral for thirty-five thousand and ninety-six.

Answer _____

2. The number 875 is increased by 625. What is the new number?

Answer _____

3. Divide 372 by 12

Answer _____

4. $\frac{1}{7}$ of $\square = 19$

$\square =$

Answer _____

5. Circle the number that is NOT a square number.

9 12 16 25

6. Calculate $\frac{11}{12} - \frac{2}{3}$

Answer _____

7. Calculate $\frac{6}{7} \times 84$

Answer _____

8. Convert $\frac{47}{5}$ to a mixed number.

Answer _____

9. The maximum score of a spelling test was 50. Anika scored 60%. What was Anika's score on the test?

Answer _____

10. Sam bought two of the bottled water shown below. How much change did he receive from \$10.00?



\$ 4.25

Answer \$ _____

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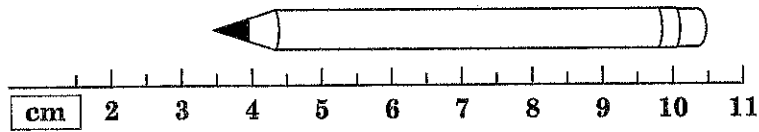
K (9)

A (1)

R (0)

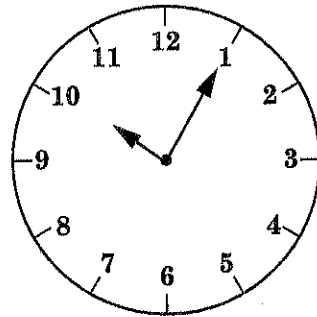
TOTAL (10)

11. What is the length of the pencil, in centimetres?



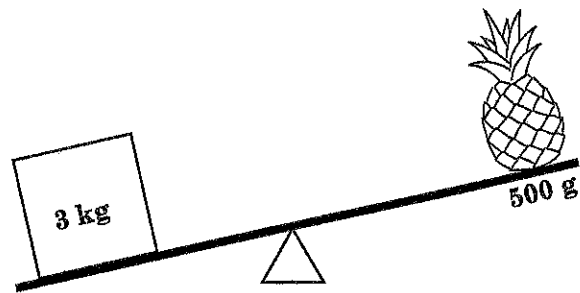
Answer _____ cm

12. Write the time shown on the clock.



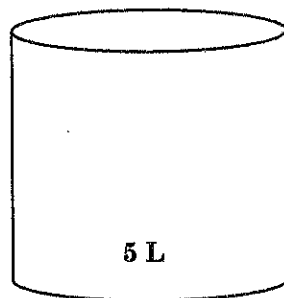
Answer _____

13. How many pineapples of the same mass will balance the scale?



Answer _____ pineapples

14. An empty container and a full carton of milk are shown below.



Container



Carton

How many cartons of milk will fill the container?

Answer _____ cartons

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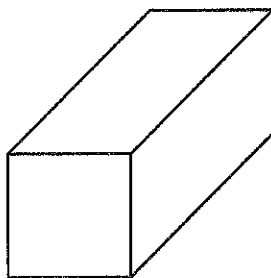
K (3)

A (1)

R (0)

TOTAL (4)

15. The cross-section of the prism shown below is a square.



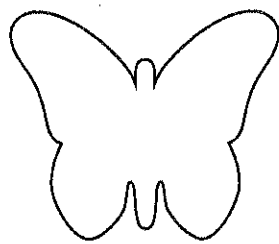
What is the name of the prism?

Answer _____

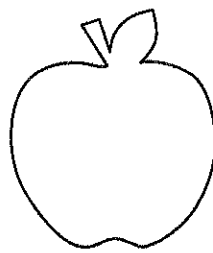
16. Which of the shapes shown below is NOT symmetrical?



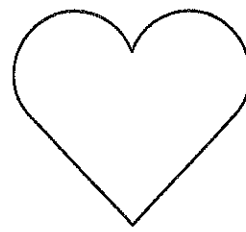
W



X



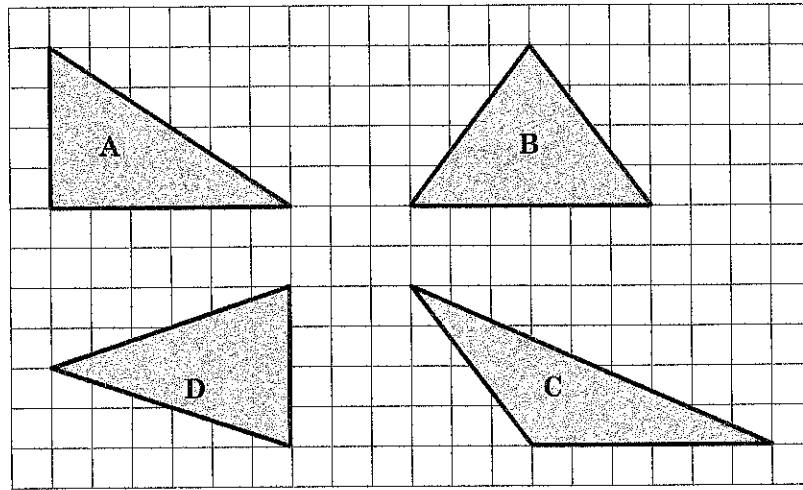
Y



Z

Answer _____

17. Which triangle below has an angle that is greater than a right angle?



Answer _____

DO NOT WRITE HERE	K (3)		A (0)		R (0)		TOTAL (3)
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18. The tally chart below shows the months in which the students in a class were born.

The Months in which Students were Born

Month	Tally
January	
April	
July	
September	

Which month represents the mode?

Answer _____

19. The table below shows Maddie's marks in her end of term tests.

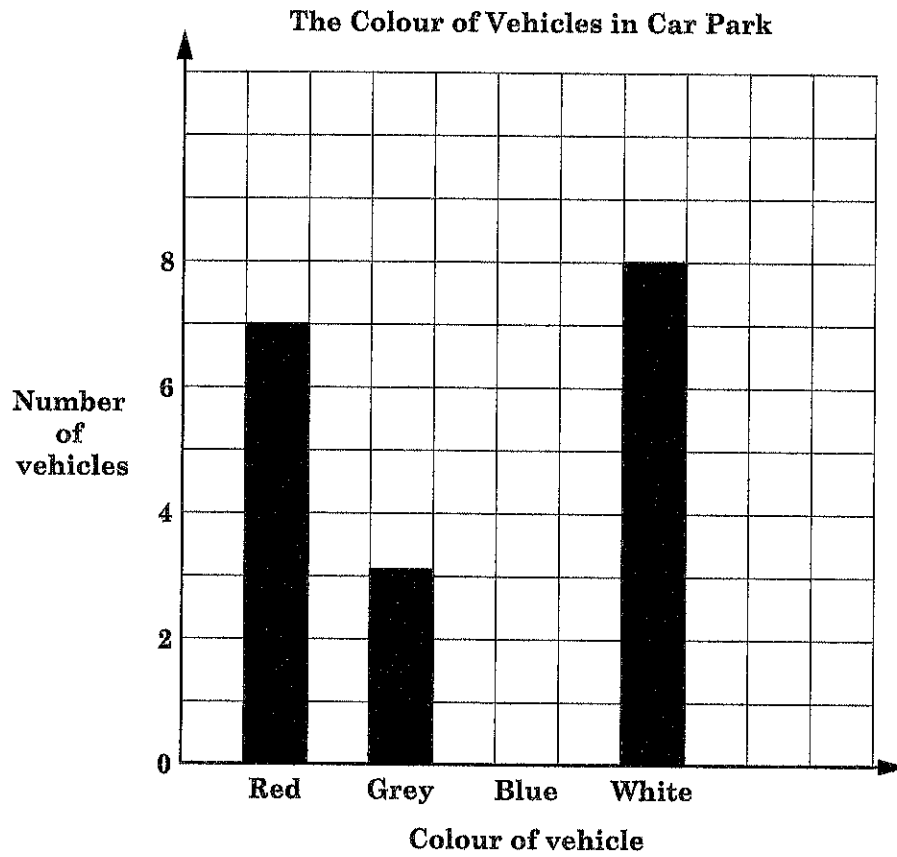
Maddie's Marks

Subject	Mathematics	Language Arts	Social Studies	Science
Marks obtained	80	91	82	53

What was Maddie's mean mark?

Answer _____

20. The incomplete bar graph below shows the colour of the vehicles in a car park.



If there are 24 vehicles in the car park, how many of the vehicles are blue?

Answer _____ blue vehicles

DO NOT WRITE HERE	K (3)		A (0)		R (0)	TOTAL (3)
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SECTION 2

21. Write the following numbers in ascending order.

135.9 319.5 53.91 95.31

Answer _____

(2 marks)

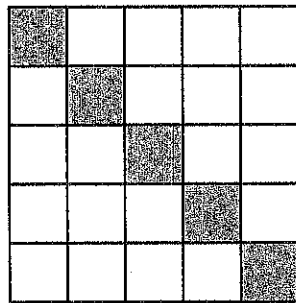
22. Write the correct number in each shape below to complete the number sentences.

$$199 \times 75 = (199 + \triangle) \times 75 - 75$$

$$199 \times 75 = \square \times 75 - 75$$

(2 marks)

23. The shaded fraction of the square represents 16 students in a class.



What is the **total** number of students in the class?

Answer _____ students

(2 marks)

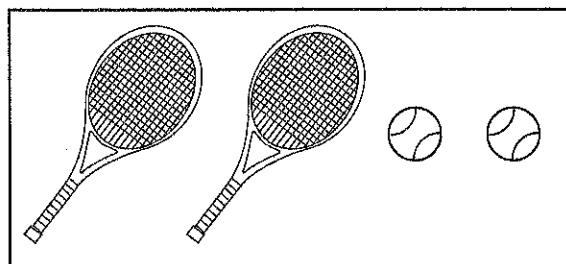
24. Anil's age is a factor of 48. Seven years ago, his age was a multiple of 5.
What is Anil's age now?

Answer _____ years (2 marks)

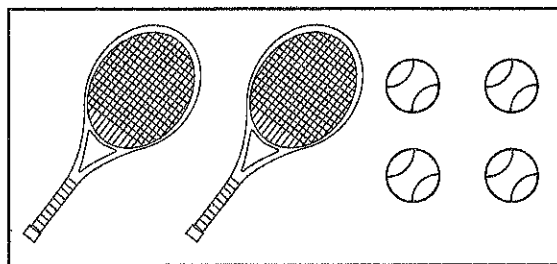
25. Mr. Grant bought 48 m of wire. He used $\frac{13}{16}$ of the wire to make basket frames.
He cut the remaining wire into equal lengths to make basket handles. Each
basket handle was made with $\frac{3}{4}$ m of wire.
How many basket handles did he make?

Answer _____ basket handles (3 marks)

26. The costs of rackets and balls are shown below.



\$ 184.00



\$ 224.00

Calculate the cost of 1 racket.

Answer \$ _____

(3 marks)

27. A vendor received a total of \$125.00 from the sale of snow-cones and ice-cream cones. The cost of a snow-cone is \$5.00 and the cost of an ice-cream cone is \$10.00. He sold 7 **more** snow-cones than ice-cream cones.

Calculate the **total** number of snow-cones sold.

Answer _____ snow-cones

(3 marks)

28. Corey's weekly allowance was \$60.00. He received $\frac{1}{8}$ of his weekly allowance for each of the three additional chores he completed.

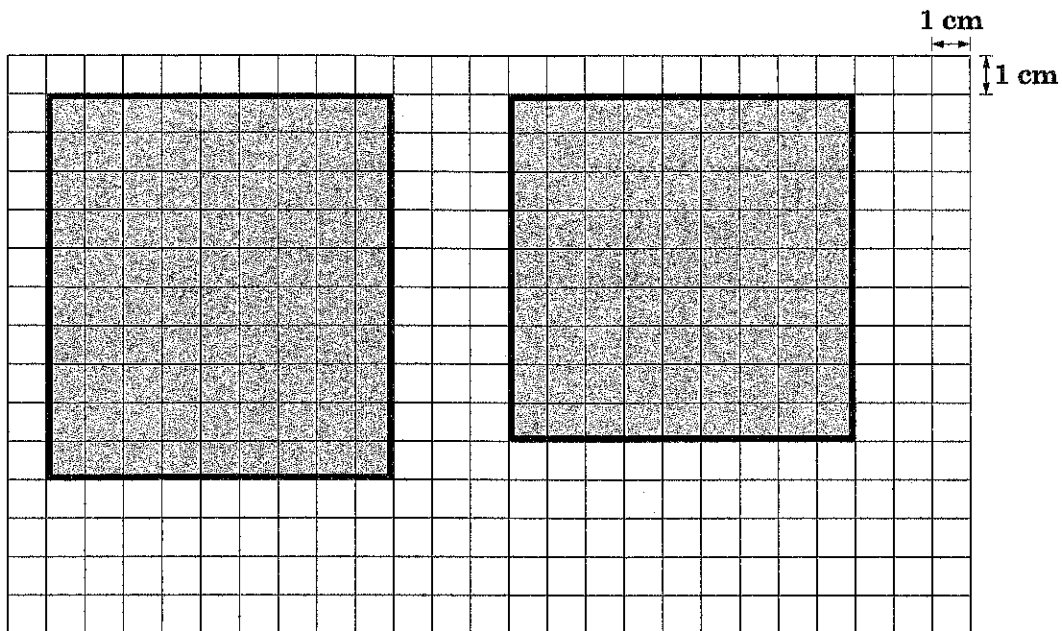
Calculate Corey's **total** allowance for the week.

Answer \$ _____

(3 marks)

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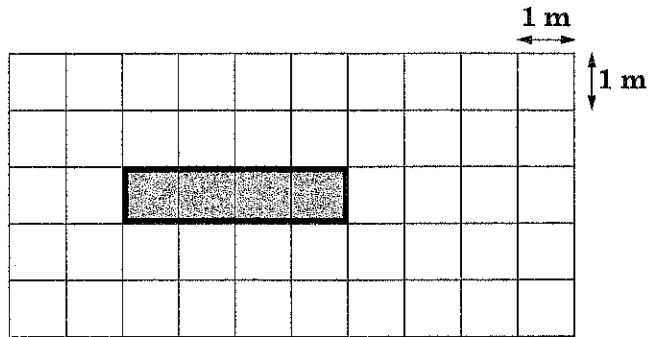
29. A square and a rectangle are drawn on the 1 cm grid below.



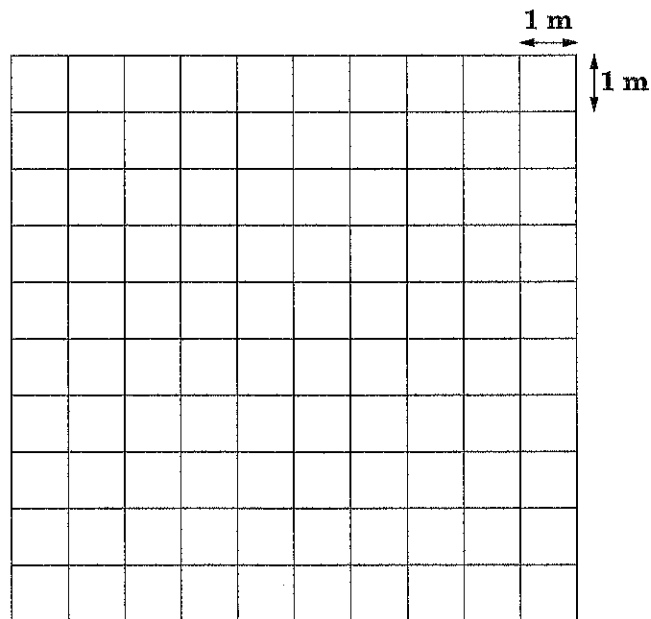
What is the **difference** in their perimeters?

Answer _____ cm (2 marks)

30. The shaded rectangle on the 1 m grid below represents a flower bed. The flower bed is $\frac{1}{9}$ of the area of a square park.

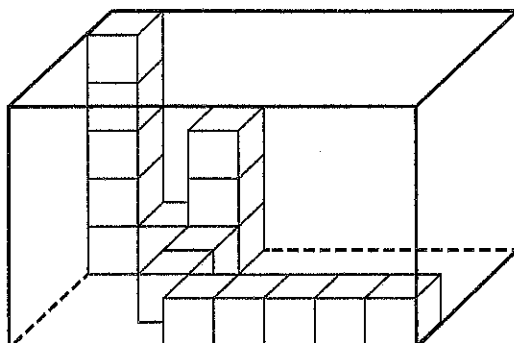


On the grid below, draw the **square** park and shade its area.



(2 marks)

31. Small identical cubes are placed inside a cuboid as shown below.



How many **more** of these cubes are needed to fill the cuboid completely?

Answer _____ cubes (3 marks)

32. The time on a clock is correct at 8:00 a.m. The clock loses 5 minutes every hour. What time would the clock show when the correct time is 3:00 p.m.?

Answer _____ p.m. (3 marks)

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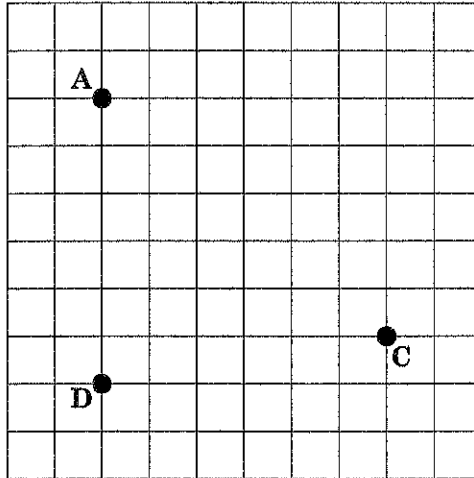
K (0)

A (7)

R (3)

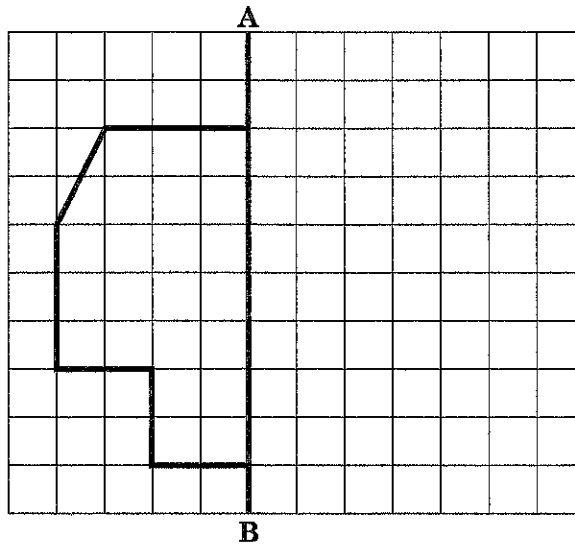
TOTAL (10)

33. On the grid below, label the position of the point B such that the quadrilateral ABCD has one right angle. Draw lines to form the quadrilateral ABCD.



(2 marks)

34. An incomplete symmetrical shape is shown on the grid below. Using AB as the line of symmetry, complete the shape.



(2 marks)

DO NOT WRITE HERE	K (0)	A (4)	R (0)	TOTAL (4)
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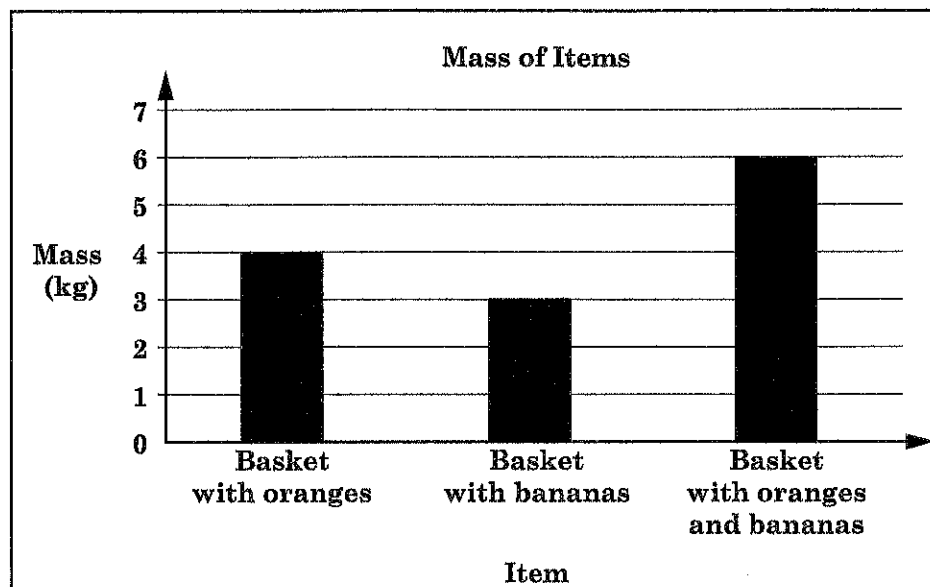
35. The mean of four numbers was 80. When one number was removed the mean remained 80.

Explain how this was possible.

Answer _____

(2 marks)

36. A basket with oranges was weighed. The same basket was weighed with bananas. Finally, the basket was weighed with the oranges and the bananas. The graph below shows the mass of the items.



What is the mass of the basket?

Answer _____ kg (3 marks)

DO NOT WRITE HERE	K (0)	A (5)	R (0)	TOTAL (5)
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SECTION 3

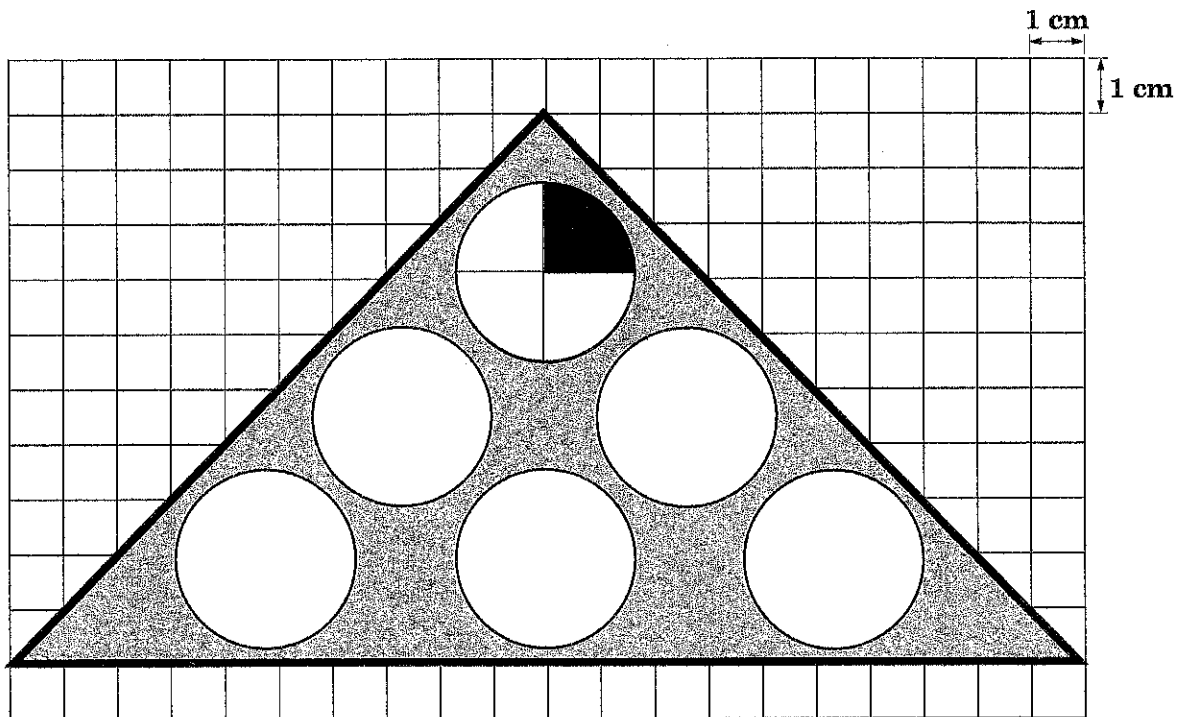
37. Indira had 90 pens. She kept $\frac{1}{3}$ for herself and gave $\frac{1}{4}$ of the remainder to Keone. She shared the remaining pens between Alison and Yvette such that Alison received 9 more pens than Yvette.

How many pens did Alison receive?

Answer _____ pens (4 marks)

DO NOT WRITE HERE	K (0)		A (0)		R (4)		TOTAL (4)	
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38. An isosceles triangle is drawn on the 1 cm grid below. Six identical circles partially cover the triangle. Each circle is divided into four equal parts. The area of the shaded fraction shown in the circle is 2 cm^2 .

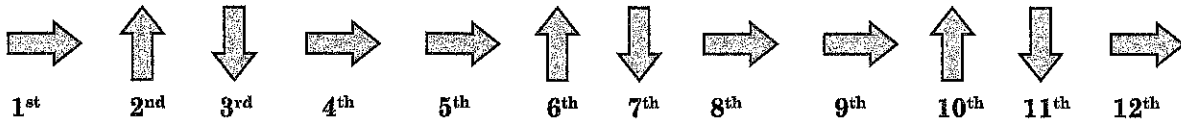


What area of the triangle is **not** covered by the circles?

Answer _____ cm^2 (4 marks)

DO NOT WRITE HERE	K (0)		A (0)		R (4)		TOTAL (4)
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39. The incomplete pattern below shows the position of its elements.



(a) Explain the pattern rule.

Answer _____

(b) Draw the 19th element.

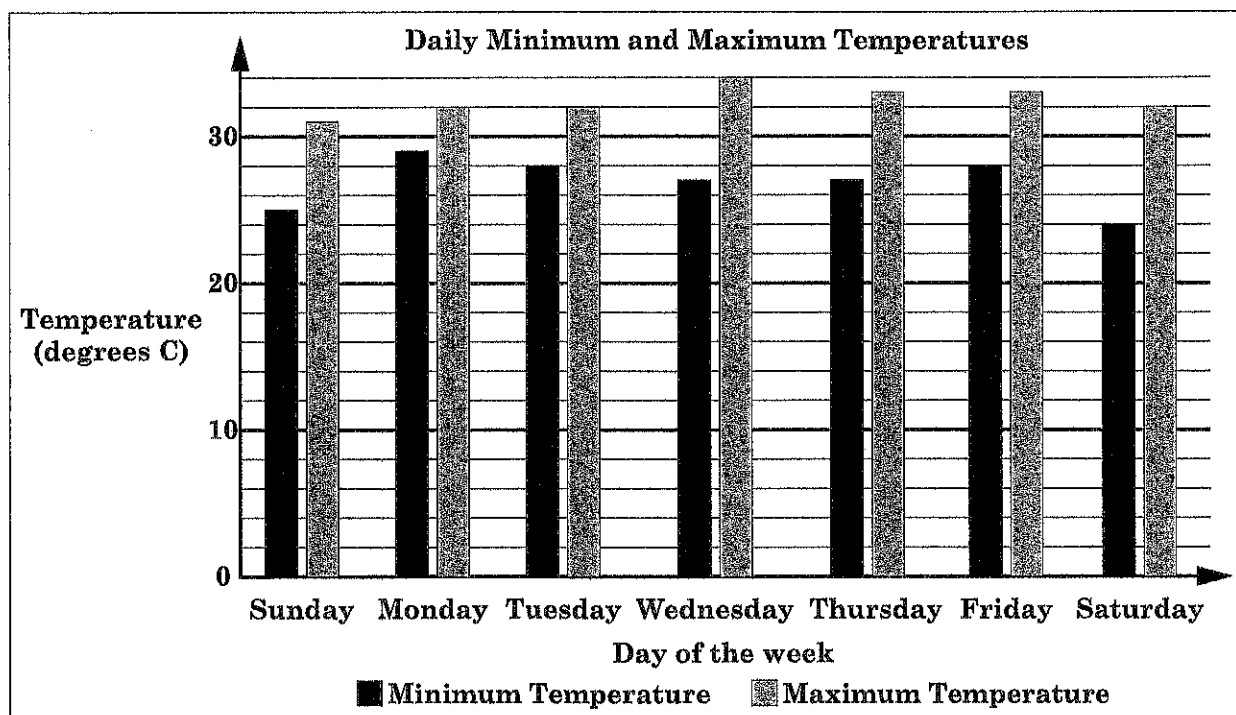
(c) State the position at which the pattern begins repeating for the fifth time.

Answer _____

(4 marks)

DO NOT WRITE HERE	K (0)		A (0)		R (4)		TOTAL (4)	
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40. The bar graph below shows the daily minimum and maximum temperatures recorded for one week.



- (a) What is the **difference** between the minimum and maximum temperature on the hottest day?

Answer _____ degrees C

- (b) On which days is the difference between the minimum and maximum temperatures the same?

Answer _____

- (c) On which day is the difference between the minimum and maximum temperatures the largest?

Answer _____

(4 marks)

DO NOT WRITE HERE	K (0)		A (0)		R (4)		TOTAL (4)
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END OF TEST

**IF YOU FINISH BEFORE TIME IS CALLED,
YOU MAY CHECK YOUR WORK BEFORE HANDING IN YOUR PAPER.**