Write your name here

Surname	Other names

Centre Number | Candidate Number

Pearson Edexcel International Primary Curriculum

Mathematics

Year 6
Achievement Test

Thursday 4 June 2015 – Morning
Time: 1 hour

Paper Reference
JMA01/01

You must have:
Ruler graduated in centimetres and millimetres, pen, HB pencil, eraser.
Tracing paper may be used.

Total Marks

Instructions

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **all** questions.
- Answer the questions in the spaces provided – *there may be more space than you need.*
- Calculators are **NOT** allowed.

Information

- The total mark for this paper is 60.
- The marks for **each** question are shown in brackets – *use this as a guide as to how much time to spend on each question.*

Advice

- Read each question carefully before you start to answer it.
- Try to answer every question.
- Check your answers if you have time at the end.

Turn over

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1/1/1/1/1/1/

P 4 4 9 5 9 A 0 1 2 4

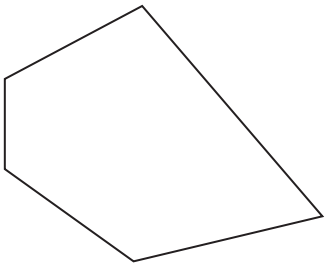
PEARSON

SECTION A

Answer ALL questions.

In Section A put a cross in each correct box ☒ to indicate your answer. If you change your mind, put a line through the box ☒ and then put a cross in another box ☒.
Each question in Section A is worth one mark.

1 What is the name of this shape?



octagon ☐ quadrilateral ☐ pentagon ☐ hexagon ☐

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2 Calculate 83 – 27

54 ☐ 56 ☐ 64 ☐ 66 ☐

---

3 What is the length of this line?

6.7 mm ☐ 62 mm ☐ 67 mm ☐ 57 mm ☐

---

4 Here is a number pattern. What is the missing number?

27, 34, 41, ?, 55, 62

45 ☒ 48 ☒ 50 ☒ 51 ☒

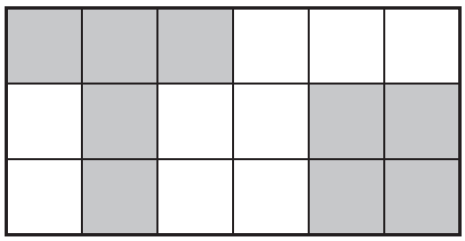
5 There are 30 students in Class 6. This tally chart shows the students' favourite colours.

Colour	Tally
Red	卌 卌 卌
Blue	|||
Green	卌 ||
Yellow	卌

How many **more** students said red is their favourite colour than said green is their favourite colour?

8 ☒ 6 ☒ 12 ☒ 22 ☒

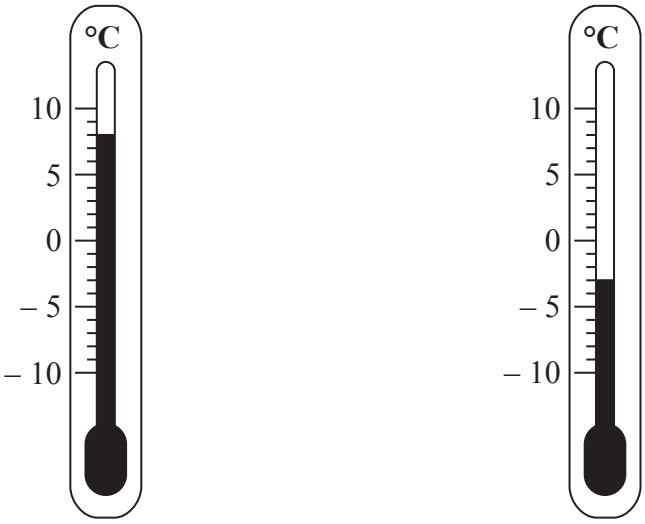
6 Look at this rectangle.



What fraction of the rectangle is shaded?

$\frac{1}{4}$ ☒ $\frac{1}{2}$ ☒ $\frac{1}{8}$ ☒ $\frac{1}{6}$ ☒

7 These thermometers show the temperatures, in °C, in London and New York on one day.



How many degrees colder was it in New York than in London?

5 °C ☐ 11 °C ☐ 8 °C ☐ 10 °C ☐

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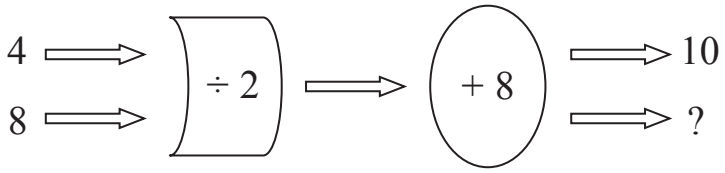
8 Here is a function machine.

When 4 is put into the machine, the output is 10.



When 8 is put into the machine, what will the output be?

4 ☐ 12 ☐ 16 ☐ 20 ☐

---

9 A rectangular garden is 8 m long and 3 m wide.

What is the perimeter of the garden?

11 m ☐ 19 m ☐ 22 m ☐ 24 m ☐

---

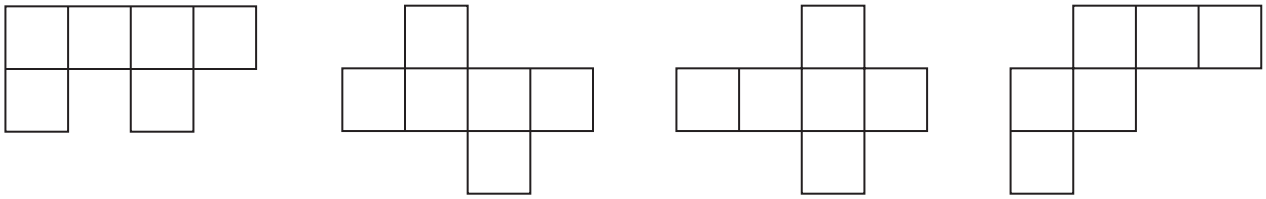
10 What is 548 rounded to the nearest hundred?

500 ☒ 540 ☒ 550 ☒ 600 ☒

11 Which of these numbers is a prime number?

9 ☒ 15 ☒ 17 ☒ 21 ☒

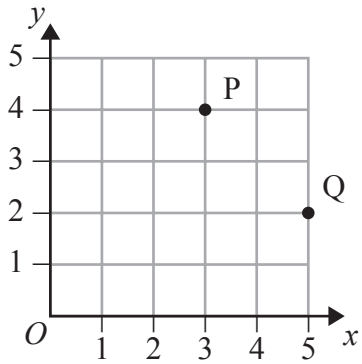
12 Which of these are nets for a cube?



A B C D

A and B ☒ B and C ☒ C and D ☒ D and A ☒

13



What are the coordinates of the points P and Q on this grid?

P(3, 4) Q(5, 2) ☒ P(4, 3) Q(5, 2) ☒ P(3, 4) Q(2, 5) ☒ P(5, 2) Q(3, 4) ☒

14 Sajid has 21 balls in a box.
5 balls are green.
16 balls are blue.

Sajid picks a ball at random from the box.

What is the probability that he will pick a green ball?

$\frac{5}{16}$ ☒ $\frac{5}{21}$ ☒ $\frac{5}{26}$ ☒ $\frac{9}{16}$ ☒

---

15 What is 40% of 60?

4 ☒ 6 ☒ 24 ☒ 240 ☒

---

16 James has 0.7 kg of chocolate and Peter has 450 g of chocolate.

How much chocolate do they have altogether?

11.5 g ☒ 457 g ☒ 520 g ☒ 1150 g ☒

---

17 What is the value of x in this equation?

$$4x + 5 = 17$$

88 ☒ 8 ☒ 5.5 ☒ 3 ☒

---

18 Here is a triangle.

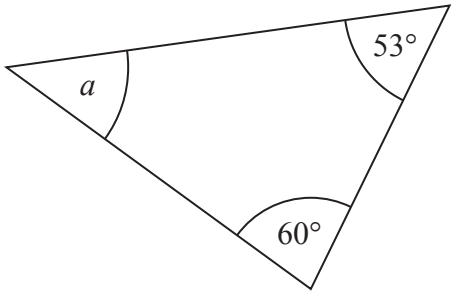


Diagram **NOT** accurately drawn

What is the size of angle *a*?

67° ☒ 77° ☒ 120° ☒ 127° ☒

---

19 Here are the marks of some children in their English test.

14 7 21 30 14 29 18

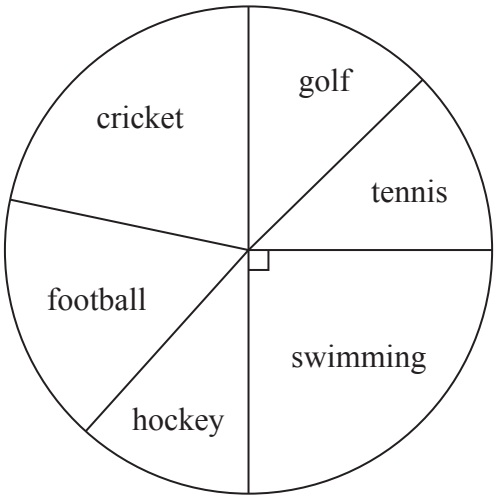
What is the median mark for these children?

14 ☒ 18 ☒ 19 ☒ 30 ☒

---

20 A group of 96 children were asked to choose their favourite sport.

Their answers are displayed in this pie chart.



The angle for football is 60°

How many children chose football?

16 ☒ 24 ☒ 32 ☒ 60 ☒

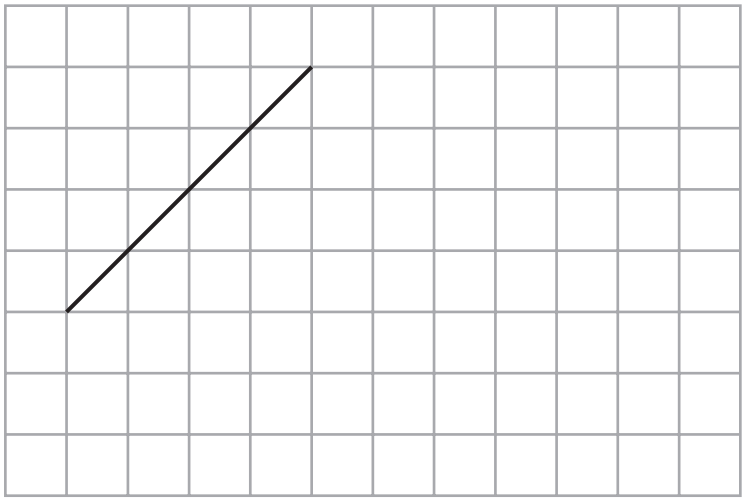
TOTAL FOR SECTION A IS 20 MARKS

SECTION B

Answer ALL questions.

21 One side of a triangle has been drawn for you on the grid.

Draw 2 more lines to form a right-angled triangle.



(Total for Question 21 is 1 mark)

22 Write the number *six hundred and six* in figures.

.....

(Total for Question 22 is 1 mark)

23 The factors of 6 are:

1 2 3 6

Write down all the factors of 24

.....

(Total for Question 23 is 2 marks)

24 The pictogram shows the number of hours of sunshine each day for one week.

Monday	◯◯◯◯◯◐
Tuesday	◯◯◯◐
Wednesday	◯◯◯◯◐
Thursday	◯◯◯
Friday	◯◯◯◯◯
Saturday	◯◯◯◐
Sunday	◯◯◯◯

◯ = 2 hours of sunshine

(i) How many hours of sunshine were there on Wednesday?

.....

(1)

(ii) How many more hours of sunshine were there on Monday than on Thursday?

.....

(1)

(Total for Question 24 is 2 marks)

25 Fill in the boxes to make these fractions equivalent.

(a)

$$\frac{1}{4} = \frac{\square}{8} = \frac{3}{\square} = \frac{\square}{20}$$

(1)

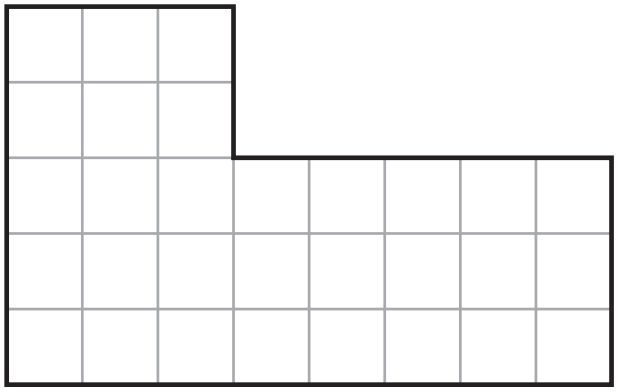
(b) Fill in the boxes to make two different equivalent fractions.

$$\frac{2}{3} = \frac{\square}{\square} = \frac{\square}{\square}$$

(2)

(Total for Question 25 is 3 marks)

26 Find the perimeter of the shape drawn on the grid. The grid is made of 1 cm squares.

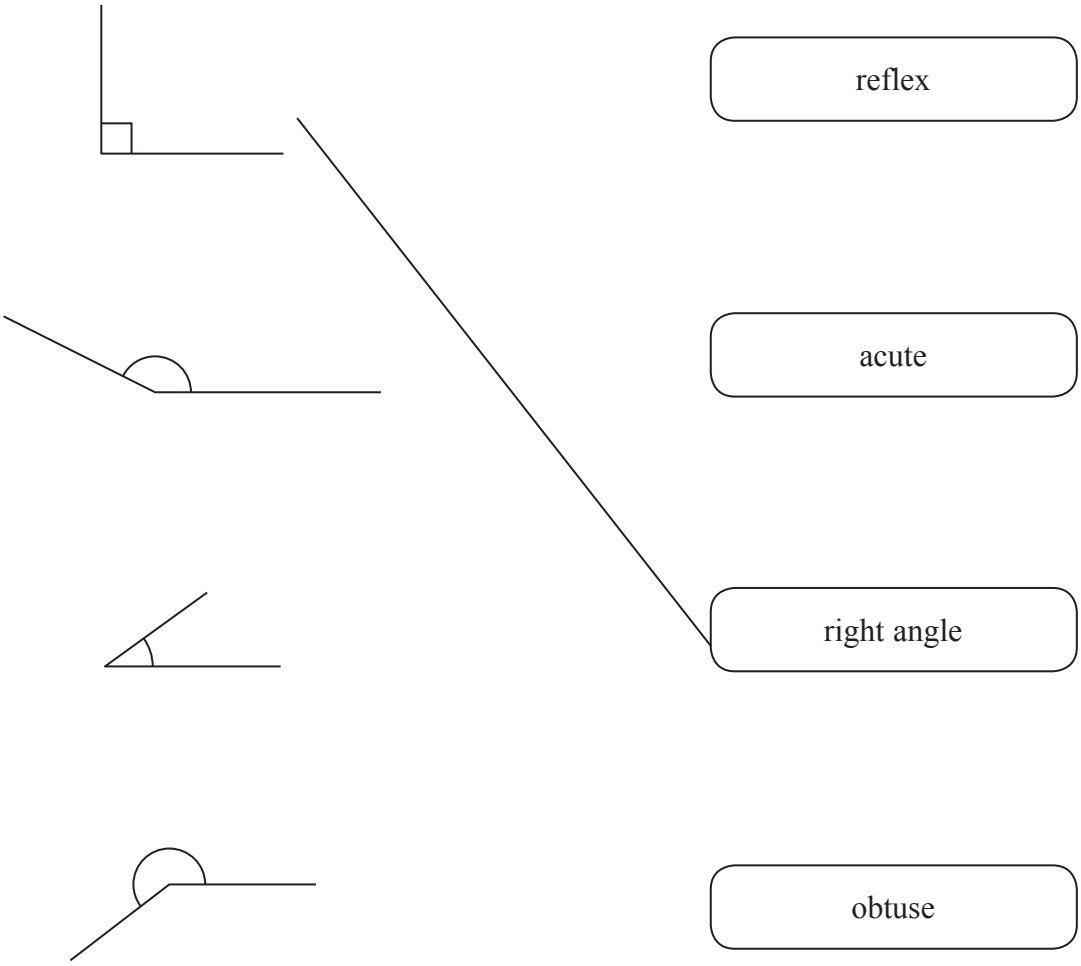


..... cm

(Total for Question 26 is 1 mark)

27 Draw a line to join each angle to the correct label.

One has been drawn for you.



(Total for Question 27 is 1 mark)

28 Write these numbers in order of size.

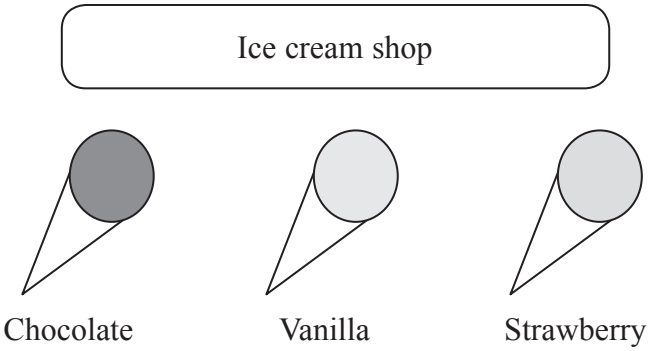
Start with the smallest.

5.5 2.5 5.25 2.25 5.02

smallest largest

(Total for Question 28 is 2 marks)

29



Mrs Singh sells three flavours of ice cream in her shop.
Yesterday Mrs Singh sold 30 ice creams.

$\frac{1}{3}$ of the ice creams were strawberry.

20% of the ice creams were chocolate.

How many vanilla ice creams did Mrs Singh sell yesterday?

.....

(Total for Question 29 is 2 marks)

30 Here is a list of numbers.

5 21 36 15 81 90 16 72

Write down the square numbers in the list.

.....

(Total for Question 30 is 1 mark)

31 In a sports competition, the distance children threw a javelin was measured.

Sara's throw was 7 m 42 cm.

Mina's throw was $\frac{3}{4}$ m longer than Sara's.

How far did Mina throw her javelin?

Give your answers in centimetres (cm).

..... cm

(Total for Question 31 is 1 mark)

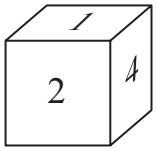
32 Calculate

$$1232 \div 8$$

.....

(Total for Question 32 is 2 marks)

33 Here is a fair dice.



Sanjay rolls the dice.

What is the chance of Sanjay rolling a 4?

Circle the correct answer.

Impossible Unlikely Even Likely Certain

(Total for Question 33 is 1 mark)

34 Mrs Smith gave a group of students a mathematics test. Here are their scores.

15 14 18 14 16 10

(i) What is the mode of their scores?

.....

(1)

(ii) What is the range of their scores?

.....

(1)

(Total for Question 34 is 2 marks)

35 Salma is writing a number sequence. Her rule is:

Double the previous number then subtract 1

Fill in the boxes to complete Salma's number sequence.

	17	33		129

(Total for Question 35 is 2 marks)

36 Simplify these expressions

(i) $2b + a + 3a + b$

.....

(1)

(ii) $4x + 3y - 5y + 3x$

.....

(1)

(Total for Question 36 is 2 marks)

37 (i) Write 5.4 to the nearest whole number.

.....

(1)

(ii) Write 6.18 to 1 decimal place.

.....

(1)

(Total for Question 37 is 2 marks)

38 Here is a triangle inside a rectangle.

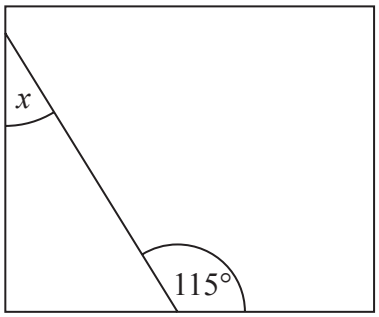


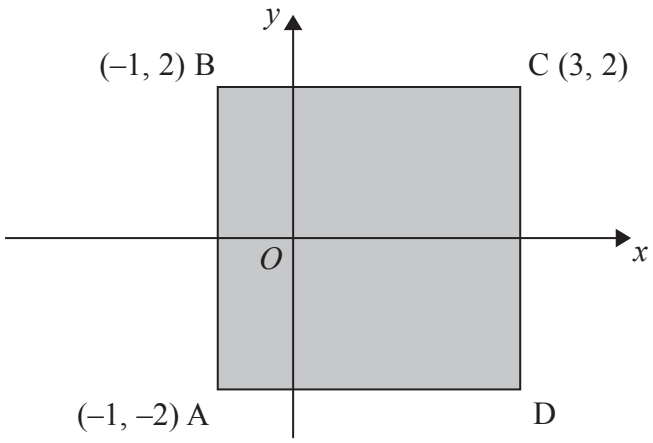
Diagram **NOT** accurately drawn

Calculate the size of angle x.

.....°

(Total for Question 38 is 2 marks)

39



A, B and C are 3 corners of a square. Point D is the fourth corner.

(i) What are the coordinates of point D?

.....

(1)

(ii) What are the coordinates of the centre of the square?

(.....,.....)

(1)

(Total for Question 39 is 2 marks)

40 (a) Work out

$$\frac{5}{8} - \frac{1}{4}$$

.....

(1)

(b) (i) Mr Powell has a box of pencils.

He gives $\frac{1}{6}$ of the pencils to Jack's table and he gives $\frac{1}{2}$ of the pencils to Jenny's table.

What fraction of the box of pencils does Mr Powell have left?

.....

(1)

(ii) There were 24 pencils in Mr Powell's box.

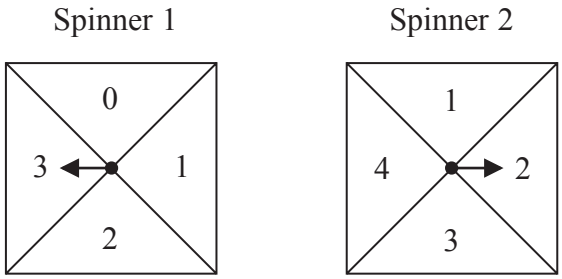
How many pencils did Mr Powell give out?

.....

(1)

(Total for Question 40 is 3 marks)

41 Here are 2 fair spinners.



(i) Sameer spins both spinners and adds the results together.

He begins to record all the possible totals.

Complete this table showing all possible totals.

One has been done for you.

		Spinner 1			
		0	1	2	3
Spinner 2	1				
	2				5
	3				
	4				

(1)

(ii) What is the most likely total?

.....

(1)

(iii) What total is equally likely to occur as 5?

.....

(1)

(Total for Question 41 is 3 marks)

42 Work out

$$634 \times 37$$

.....

(2)

(Total for Question 42 is 2 marks)

TOTAL FOR SECTION B IS 40 MARKS
TOTAL FOR PAPER IS 60 MARKS

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