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**SEAG**  
**Entrance Assessment**



STIRLING TUITION  
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**Practice Paper 13**

**(Cut Answer Sheet from Back Page)**

# English – Practice Test

In this question there is either **one** punctuation mistake or **no** punctuation mistake. Find the group of words with the mistake in it and mark its letter on your answer sheet. **If there is no mistake, mark N.**

**P1** "Don't forget to take an umbrella!" he shouted. "It's raining cat's and dogs out there."  
A B C D

*No apostrophe needed*

In this question you have to choose the **best** word to complete the sentence, so that it makes sense and is written in correct English. Choose the **best** answer and mark its letter on your answer sheet.

**P2** As soon as I opened the front door, the dog ran out like a bolt of  
light speed lightning thunder flash  
A B C D E

In this question there is either **one** spelling mistake or **no** spelling mistake. Find the group of words with the mistake in it and mark its letter on your answer sheet. **If there is no mistake, mark N.**

**P3** I enjoyed my aunt's wedding, despite having to sit at a table with lots of crying babys.  
A B C D

*babies*

Read this passage to yourself.

**Extract from: The Nightingale by Hans Christian Andersen**

P5

The palace was elegantly decorated for the occasion. The walls and floors of porcelain glittered in the light of a thousand lamps. Beautiful flowers, round which little bells were tied, stood in the corridors: what with the running to and fro and the draught, these bells tinkled so loudly that no one could speak to be heard. In the centre of the great hall, a golden perch had been fixed for the nightingale to sit on. P4

Answer this question. Choose **one** answer from the options below and mark its letter on your answer sheet.

P4

**Which of the following is true about the way the palace is decorated?**

- A It is decorated with a thousand candles.
- B There are bells on the walls and floors.
- C The walls and the floors are painted gold.
- D The decorations are very noisy.
- E The only decorations are flowers.

For this question, you have to write your answer in the box provided on your answer sheet (box P5).

P5

Which **word** from the passage means the same as "sparkled"?

glittered

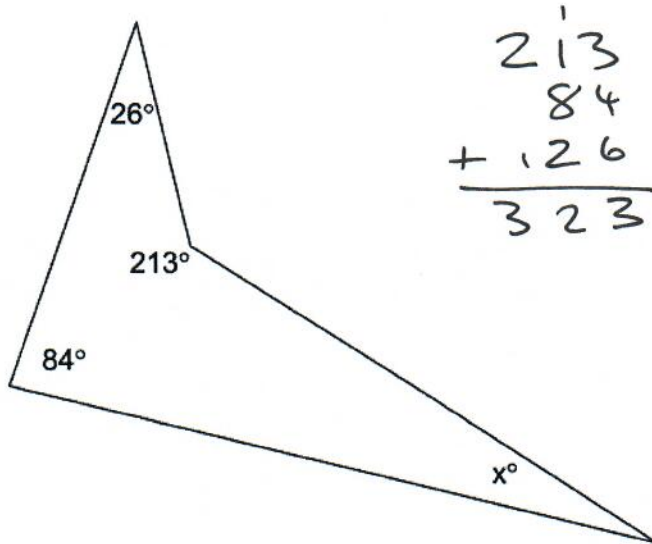




# Maths – Practice Test

P6

Look at the quadrilateral below.



$$\begin{array}{r} 213 \\ 84 \\ + 126 \\ \hline 323 \end{array}$$

$$\begin{array}{r} 360 \\ - 323 \\ \hline 37 \end{array}$$

What is the size of angle  $x$ ?

A  $360^\circ$

**B  $37^\circ$**

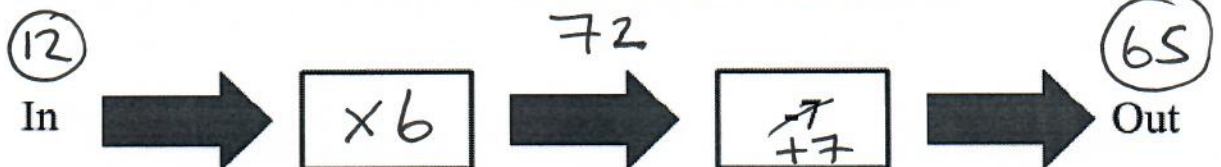
C  $323^\circ$

D  $213^\circ$

E  $180^\circ$

P7

Look at the function machine below. One of the functions is missing.



The number 12 is entered in the function machine and the number that comes out is 65.

What could the missing function be to make this true?

**A  $\times 6$**

B  $- 60$

C  $\div 6$

D  $+ 12$

E  $\times 5$

# P8

Patrick is making an omelette. He uses 3 cubes of butter for every two eggs.

How many eggs does he need to use if he puts in 15 cubes of butter?

$$\begin{array}{r} B : E \\ \times 3 : 2 \\ \hline \times 5 \downarrow 15 : 10 \times 5 \end{array}$$

A 30

B 5

C 15

D 25

E 10

For these questions you have to **write your answers** in the boxes provided on your answer sheet (box P9 and P10). The units of measurement have been given.

# P9



1 (2) 3 (4) 5

(6) 7 (8) 9

$$\frac{4}{9}$$

I have a nine-sided dice.

What is the probability that I will roll an even total?

$$\frac{4}{9}$$

# P10

Look at the 4 digits below.

3 9 2 4

You can use these digits to make a four-digit number, for example 3924.

Use the digits above can you make a number which is less than 5000 but more than 4930?

4932



# English – Main Test

In this exercise there are some mistakes with **punctuation** or use of **capital letters**. On each numbered line there is either **one** mistake or **no** mistake. Find the group of words with the mistake in it and **mark its letter on your answer sheet**. If there is **no** mistake, mark **N**.

## Punctuation Exercise

1 "Are you sure this is the right way?" asked Dad. "I think that we are going around in circles."  
A B C D  
*Question Mark.*

2 If you want to get a dog, you need to be prepared to feed, exercise and clean up after it.  
A B C D  
*Comma needed.*

3 As the campers sat around the fire eating, the bear rustled in the bushes.  
A B C D  
*Comma needed.*

4 Every year Dave dreams of visiting Disney World and every year he is disappointed.  
A B C D N

5 She could see all of her friend's bikes lined up on the pavement outside her house.  
A B C D  
*Apostrophe after the s as more than one friend.*



In this exercise you have to choose the **best** word, or **group of words**, to complete each numbered line so that the passage makes sense and is written in correct English. Choose the best answer and **mark its letter on your answer sheet**.

## Grammar Exercise

6

Please stay in your seats  because  until  although  or  and

A B C D E

the train comes to a complete stop.

7

If the  weather  value  amount  cost  price

A B C D E

is right, then I will buy a new car.

8

The children were asked to sing at

their  theirs  some  ours  they teacher's wedding.

A B C D E

9

Anna is coming round to pick

in  on  up  between  around her coat this afternoon.

A B C D E

10

He  was  has  will  were  is

A B C D E

eaten in many famous restaurants around the world.

In this exercise there are some **spelling** mistakes. On each numbered line there is either **one** mistake or **no** mistake. Find the group of words with the mistake in it and **mark its letter on your answer sheet**. If there is no mistake, mark **N**.

## Spelling Exercise

11 The Prime Minister said that he would resign after his party lost the election.  
↑ A      ↑↑ B      ↑↑ C      ↑↑ D      ↑

12 He has been miserable ever since his football team lost in the final of The World Cup.  
↑ A      ↑↑ B      ↑↑ C      ↑↑ D      ↑

13 Last summer we visited Egypt where we went on a tour of the ancient pyramids.  
↑ A      ↑↑ B      ↑↑ C      ↑↑ D      ↑

14 After winning first prize in the school talent competition, Holly was grinning from ear to ear.  
↑ A      ↑↑ B      ↑↑ C      ↑↑ D      ↑

15 We decided not to stay in the hotel because the room was filthy and smelly.  
↑ A      ↑↑ B      ↑↑ C      ↑↑ D      ↑ N



Read the **whole** passage carefully, then answer the questions that follow.

**Extract from: The Nightingale by Hans Christian Andersen**

1. It's many years ago now, but that is exactly the reason why it is worthwhile to listen to the  
2. story, before it's forgotten. The Emperor's palace was the most splendid in the world,  
3. wholly and entirely made of fine porcelain, very costly, but so brittle and risky to touch  
4. that one had to take very great care. In the garden the most extraordinary flowers were to  
5. be seen, and to the most magnificent of all, little silver bells were tied which tinkled, so  
6. that nobody might pass by without noticing the flower. Yes, everything was most  
7. carefully thought out in the Emperor's garden, and it extended so far that the gardener  
8. himself did not know the end of it. If you went on walking you came into a beautiful  
9. forest with tall trees and deep lakes. The forest went right down to the sea, which was  
10. blue and deep. Large ships could sail right in beneath the branches, and in the branches  
11. there lived a Nightingale, which sang so divinely that even the poor fisherman, who had  
12. so much else to think about, stopped and listened when he was out at night pulling up his  
13. fishing nets and happened to hear the Nightingale. "Lord, how pretty it is!" he said; but  
14. then he had to attend to his business, and forgot the bird. Still, the next night when it sang  
15. again, and the fisherman came out here, he said once more: "Lord, how pretty it is!"

16. From all the countries in the world travellers came to the Emperor's city and were amazed  
17. at the palace and the garden; but when they came to hear the Nightingale, they all said:  
18. "After all, this is the best thing." And the travellers told of it when they got home, and  
19. clever people wrote many a book about the City, the Palace and the Garden, but they did  
20. not overlook the Nightingale: it was put at the head of everything, and those who could  
21. make poetry wrote the loveliest poems all about the Nightingale in the forest by the deep  
22. lake.

23. The books went all over the world, and some of them came, once upon a time, to the  
24. Emperor, too. He was sitting in his golden chair reading and reading, and every minute he  
25. nodded his head, for it pleased him to hear the splendid description of the City and the  
26. Palace and the Garden. "Yet, the Nightingale is the best thing of all," was written there.

20  
27. "What's this?" said the Emperor. "The Nightingale? Why, I know nothing whatever about  
28. it! Is there such a bird in my Empire—not to say in my garden? I never heard of it! This  
29. is what one can get by reading."

30. So he called his Marshal, who was of such high rank that when anyone inferior to him  
31. made bold to address him or ask him a question, he never made any reply but "Pooh," 21  
32. which means nothing at all. "It appears that there is a most remarkable bird here, called a  
33. Nightingale," said the Emperor. "It is stated to be the very best thing in my vast realm!  
34. Why has no one ever told me anything about it?" 26

35. "I have never before heard it spoken of," said the Marshal; "it has never been presented at  
36. Court." 22

37. "I desire that it shall come here to-night and sing before me," said the Emperor. "Here is  
38. the whole world aware of what I possess, and I know nothing of it!"

39. "I have never before heard it spoken of," said the Marshal; "I must search for it, I must  
40. find it."

41. But where was it to be found? The Marshal ran up and down all the staircases, and  
42. through the halls and passages, but no one of all the people he met had heard tell of the  
43. Nightingale, and the Marshal ran back to the Emperor and said that it certainly must be an  
44. invention of the people who wrote books.



Please answer these questions. (Look at the passage again if you need to.) You should choose the **best** answer and mark its letter on your answer sheet.

16

**When does the story take place?**

- A in summer
- B in the past
- C in the future
- D at night
- E in the morning

17

**Which literary technique is being used in lines 1 – 6?**

- A simile
- B metaphor
- C onomatopoeia
- D alliteration
- E personification

18

**"Lord, how pretty it is!" (line 15) What is the fisherman talking about in this line?**

- A the nightingale
- B the night sky
- C the sea
- D the emperor's garden
- E the nightingale's song

19

**Look at lines 16 -22. Which of these statements is true about why the travellers visit the city?**

- A They want to see the city, the palace and the garden.
- B They want to see the garden.
- C They want to see the emperor.
- D They want to go fishing in the sea.
- E They want to see the palace.



20

"What's this?" said the Emperor. "The Nightingale?" (line 27) How do you think the Emperor is feeling in this paragraph?

- A happy
- B angry
- C sad
- D surprised
- E foolish

21

Look at lines 30-32. What does this suggest about the Marshal?

- A he is shy
- B he is a snob
- C he can't speak
- D he is stupid
- E he is amusing

22

"...it has never been presented at Court." (lines 35-36) What is the meaning of "Court" as it appears in this sentence?

- A a tennis court
- B a courtyard
- C the palace
- D a criminal court
- E the name of the city

For these questions you have to **write your answers**, neatly, in the boxes provided on your answer sheet.

23

What is the palace made of?

porcelain

24

What 4 things do the "clever people" write about in their books?

City, palace, garden, nightingale

25

Which word in line 3 means the same as "expensive"?

Costly

26

Which word in line 33 means the same as "extremely large"?

Vast

27

Which part of speech is "extended" as it appears in the passage? (line 7)

Verb

28

Which one part of speech are the following as they appear in the passage?

entirely (line 3) carefully (line 7) divinely (line 11) never (line 28)

Adverb

# Maths – Main Test

29

On average in Northern Ireland it was  $16^{\circ}\text{C}$  in the summer. In the winter the average temperature dropped to  $-5^{\circ}\text{C}$ .

What is the difference between the average temperatures of the summer and winter in Northern Ireland?

A  $5^{\circ}\text{C}$

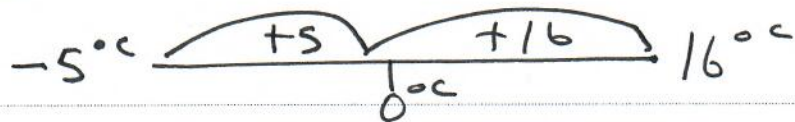
**B  $21^{\circ}\text{C}$**

C  $16^{\circ}\text{C}$

D  $11^{\circ}\text{C}$

E  $19^{\circ}\text{C}$

$$\begin{array}{r} 16 \\ + 5 \\ \hline 21 \end{array}$$



30



In a school sports day Grace, Ruth, Sam, John and Clare enter the long jump. Below is how far they jumped in the competition.

- Grace = 3.96m  $396\text{cm}$
- Ruth = 398cm  $398\text{cm}$
- Sam = 3m 91cm  $391\text{cm}$
- John = 3975 mm  $397.5\text{cm}$
- Clare = 3.95 m  $395\text{cm}$

Who jumped the furthest?

A Grace

**B Ruth**

C Sam

D John

E Clare



# 31

Jacob times himself on his ski holiday going down the final black run each day. Below are his times.

Day 1 = 19 seconds }  
 Day 2 = 18 seconds } 37  
 Day 3 = 17 seconds }  
 Day 4 = 17 seconds } 34  
 Day 5 = 16 seconds }  
 Day 6 = 15 seconds } 31

$$\begin{array}{r} 37 \\ 34 \\ + 31 \\ \hline 102 \end{array}$$

$$6 \overline{)102} \begin{array}{r} 17 \\ \hline \end{array}$$

What was Jacobs mean (average) time in seconds over the six days?

A 18

B 16

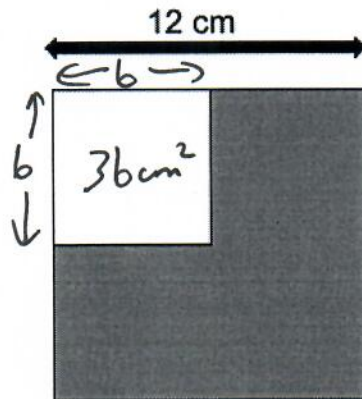
C 4

**D 17**

E 19

# 32

Look at the square below. It has a white square inside it. Each side of the white square is half the length of the larger square.



$$12 \times 12 = 144$$

$$\begin{array}{r} 144 \\ - 36 \\ \hline 108 \end{array}$$

What is the area of the grey section?

**A 108cm<sup>2</sup>**

B 144cm<sup>2</sup>

C 36cm<sup>2</sup>

D 72cm<sup>2</sup>

E 148cm<sup>2</sup>

# 33

The total perimeter of a regular hexagon is 270cm.

What is the length of one side of the hexagon?

$$\begin{array}{r} 045 \\ 6 \overline{) 2730} \end{array}$$

A 27cm

B 38cm

**C 45cm**

D 25cm

E 54cm

# 34

Max is watching The Ryder Cup. It lasts for 9 hours and 27 minutes. It finishes at midnight.

At what time did it start?

$$\begin{array}{r} 12:00 \\ - 9:27 \\ \hline 2:33 \\ + 12 \\ \hline 14:33 \end{array}$$

A 7:27pm

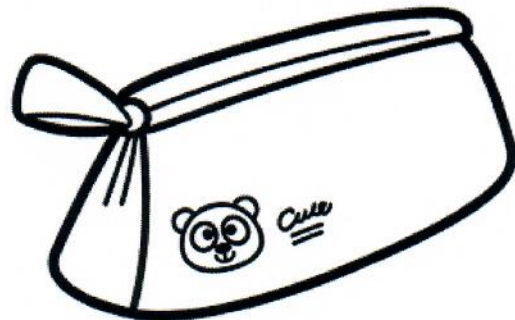
B 15:27

C 2:43pm

D 11:09

**E 14:33**

# 35



$$\begin{array}{r} 247 \\ \times 4 \\ \hline 1.88 = \text{pens} \\ + 3.36 = \text{pencil case} \\ \hline \underline{\underline{5.24}} \end{array}$$

$$\begin{array}{r} 10.00 \\ - 5.24 \\ \hline \underline{\underline{4.76}} \end{array}$$

Chloe sees a pencil case and pens in a shop. The pencil case costs £3.36 and the pens cost 47p each. She buys one pencil case and 4 pens.

How much change does she get from £10?

A £1.88

B £3.36

**C £4.76**

D £5.24

E £10.00

# 36

Look at the calculation below.

$$123 \div Z = 3$$

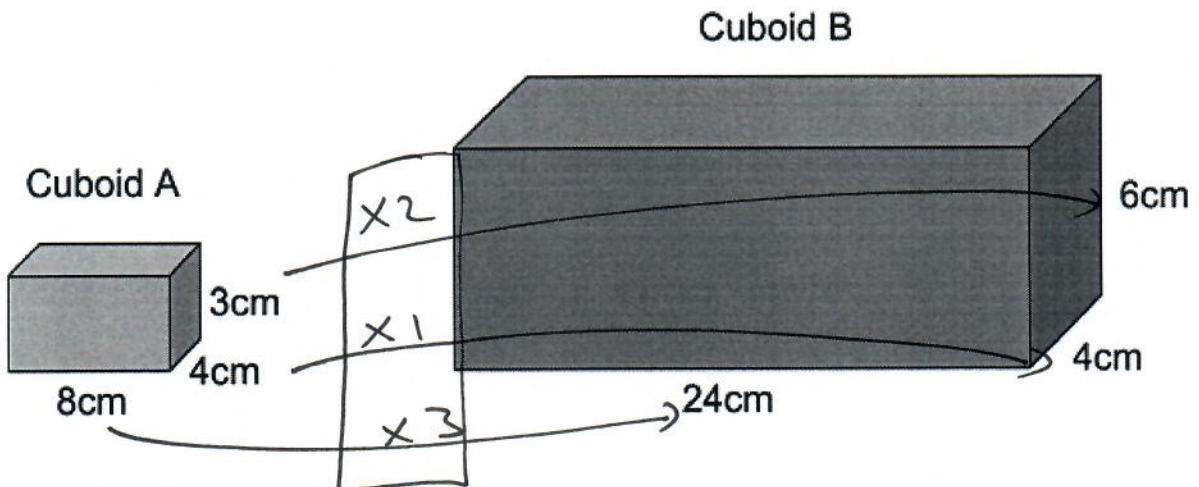
$$\begin{array}{r} 41 \\ 3 \overline{)123} \end{array}$$

What is the value of Z?

- A 369    **B 41**    C 120    D 33    E 126

# 37

Look at cuboid A and cuboid B below.



How many cuboid As can fit into cuboid B?

$$3 \times 1 \times 2 = 6$$

- A 32    **B 6**    C 3    D 96    E 576

# 38

Clare is shopping and sees a TV in the sale for £75. She is told that the TV is  $\frac{3}{5}$  of its original price.

What was the original price of the TV?

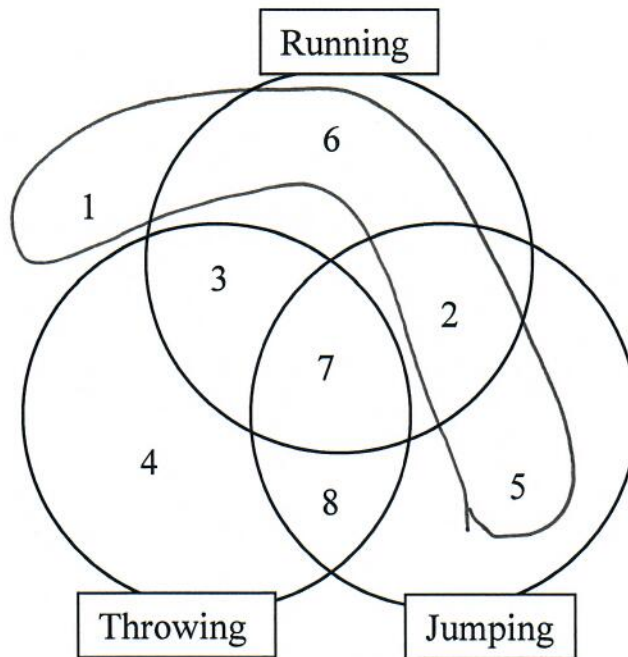
$$\frac{\div 3}{\times 5} \text{ of } \underline{125} = \underline{\pounds 75}$$

- A £100    B £45    C £25    **D £125**    E £90

$$\begin{array}{r} 25 \\ 3 \overline{)75} \end{array}$$
  
$$\begin{array}{r} 25 \\ \times 5 \\ \hline 125 \end{array}$$



Look at the Venn diagram below. It shows the different events pupils have chosen for sports day.



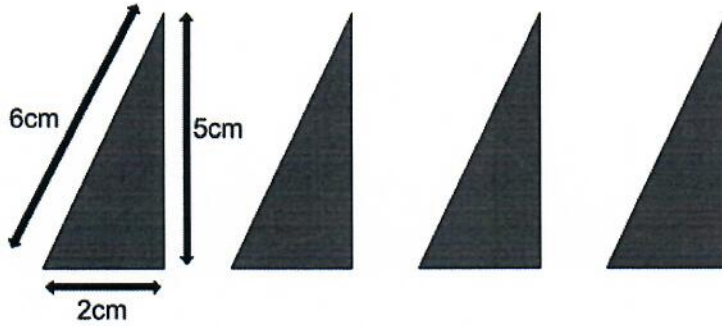
How many people are not doing a throwing event?

- A 14
- B 1
- C 13
- D 4
- E 22

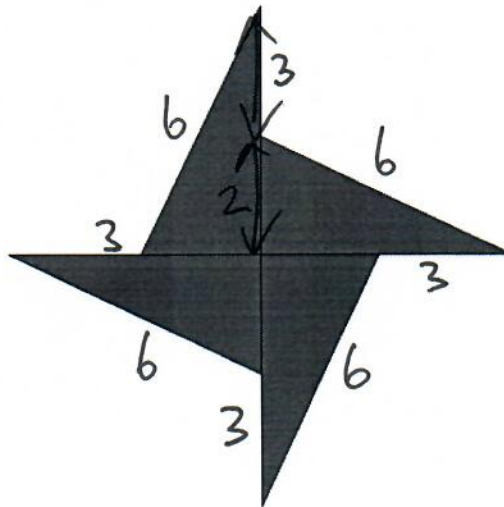
$$\begin{array}{r}
 6 + 5 + 2 + 1 = 14 \\
 11 \quad 13
 \end{array}$$

# 40

The four triangles below are all identical.



They are used to make the shape below.



$$\begin{array}{r} 6 \times 4 = 24 \\ 3 \times 4 = +12 \\ \hline 36 \end{array}$$

What is the perimeter of the shape?

A 13cm

B 44cm

**C 36cm**

D 52cm

E 24cm

# 41

How many full quarters is there in the number 13.66?

A 3

B 52

C 4

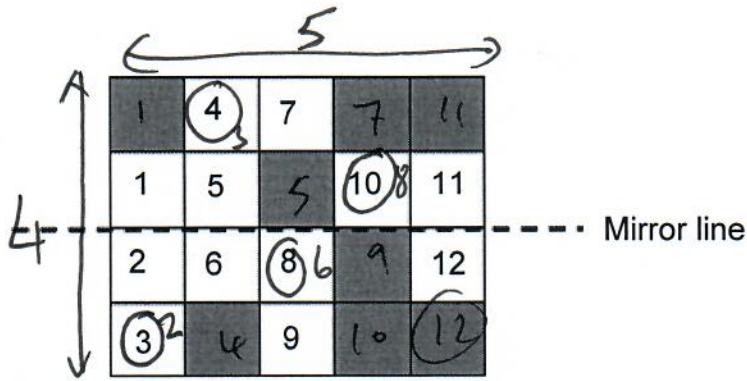
**D 54**

E 14

$$\begin{array}{r} 13.66 \\ \times 4 \\ \hline 54.64 \end{array}$$

# 42

Look at the grid below.



Which four numbers need to be shaded on the grid above to make it symmetrical on both sides of the mirror line?

A 3,5,7,11

B 2,4,8,12

C 1,6,9,10

D 5,7,10,11

**E 3,4,8,10**

# 43

Look again at the grid in Q42.

What percentage of the shape is shaded, including the 4 extra squares to make it symmetrical?

A 45%

B 50%

C 40%

D 55%

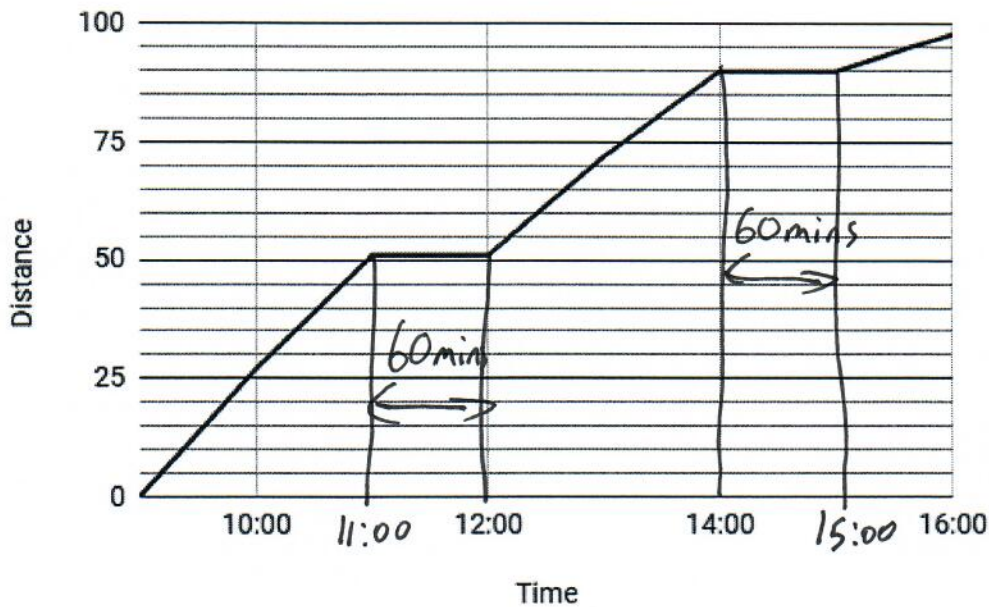
**E 60%**

$$\frac{12}{20} \times 5 = \frac{60}{100} \times 5$$



Look at the line graph below. It shows Sam's journey on his way from Belfast to Dublin.

Distance vs. Time



Sam stopped twice on his journey for a food and toilet break.

How long did he stop for in total?

- A 60mins
- B 120mins**
- C 30mins
- D 35mins
- E 75mins

$$60 + 60 = 120$$

Terry is planning for his wife's birthday in exactly one month. The date today is the 17th of October and is a Wednesday.

What day will her birthday land on?

- A Wednesday
- B Thursday
- C Friday
- D Saturday**
- E Sunday

$$31 \text{ days} = 4 \text{ weeks} + 3 \text{ days}$$

Thurs Fri **Sat**

46

Sam is 10 years old. His sister is  $\frac{3}{5}$  of Sam's age. Sam's dad is 6.5 times as old as his sister.

How old is Sam's dad?

$$\frac{3}{5} \text{ of } 10 = 6$$

$$\begin{array}{r} 36.5 \\ \times 6 \\ \hline 39.0 \end{array}$$

- A 10    B 36    **C 39**    D 6    E 65

47

Luke is painting his room and needs 4.2 litres of paint to complete the job. The paint comes in 350ml pots and each pot costs £3.74.

What is the total cost of the paint for his room?

$$\begin{array}{r} 3.74 \\ \times 12 \\ \hline 748 \\ 3740 \\ \hline 44.88 \end{array}$$

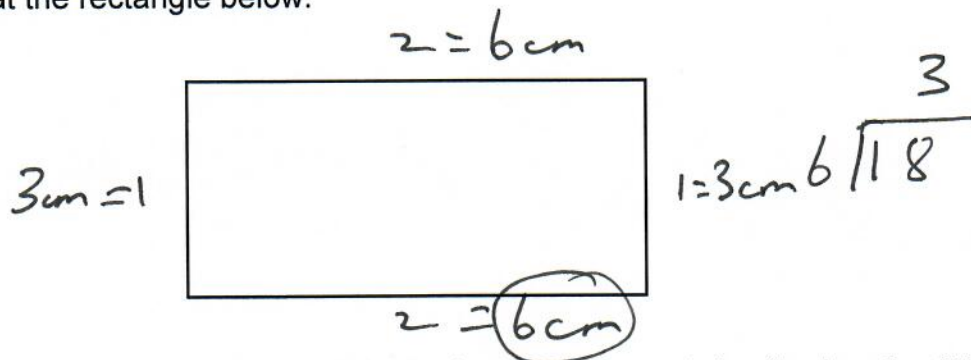
- A £37.40    B £42.00    C £21.37    D £56.24    **E £44.88**

$$\begin{array}{r} 12 \\ 7 \overline{) 084} \\ \underline{70} \phantom{0} \\ 140 \\ \underline{140} \\ 0 \end{array}$$

£56

48

Look at the rectangle below.



It has a perimeter of 18cm and the horizontal lines are twice the length of the vertical lines.

What is the length of one of the horizontal lines?

- A 5cm    **B 6cm**    C 3cm    D 4cm    E 9cm

49

What is the sum of the 5th multiple of 13 and the 7th multiple of 19?

- A 133    B 8645    C 65    D 91    E 198

$$\begin{array}{r} 133 \\ + 65 \\ \hline 198 \end{array}$$

$$\begin{array}{r} 13 \\ \times 5 \\ \hline 65 \end{array} \qquad \begin{array}{r} 619 \\ \times 7 \\ \hline 133 \end{array}$$

50

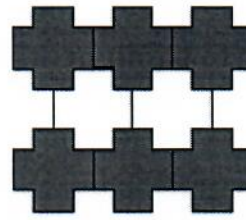
Look at the pattern below. It is made up of white and grey tiles.



Pattern 1



Pattern 2



Pattern 3

What is the difference between the number of white tiles in pattern 5 and pattern 12?

- A 3  
 B 4  
 C 5  
 D 6  
 E 7

1	2	3	4	5	6	7	8	9	10	11	12
1	2	2	3	3	4	4	5	5	6	6	7

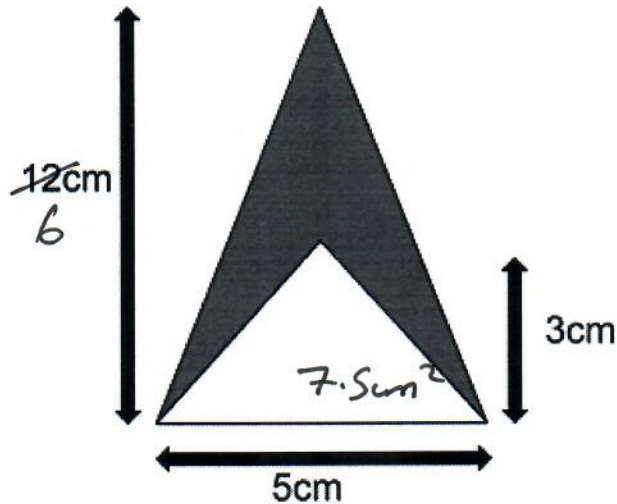
$$7 - 3 = 4$$



For questions 51–56, you have to **write your answers** in the boxes provided on your answer sheet. The units of measurement have been given.

# 51

Look at the shape below. It is a white triangle lying on top of a grey triangle.



$$6 \times 5 = 30$$

$$\begin{array}{r} 22.5 \\ - 7.5 \\ \hline 15.0 \\ \div 2 \\ \hline 7.5 \end{array}$$

$$3 \times 5 = 15 \div 2 = 7.5\text{cm}^2$$

The width of both the triangles is 5cm. The height of the grey triangle is 12cm. The height of the white triangle is 3cm.

**What is the area that is shaded grey?**

$22.5\text{cm}^2$

# 52

The sequence below is made using the following rule.

Subtract 3 from the previous number, then multiply by 4.

5                      8                      20                      68

$$\begin{array}{r} 68 \\ - 3 \\ \hline 65 \\ \times 4 \\ \hline 260 \\ \hline 260 \end{array}$$

**What is the first and last number in the sequence above?**

$5$  and  $260$

# 53

Look at the table below relating to 3D shapes.

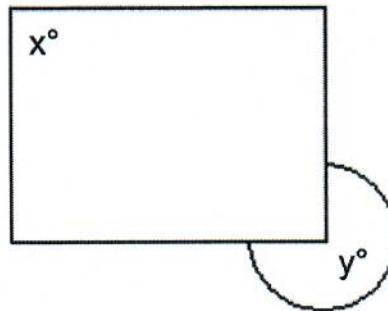
Shape	Vertices	Edges	Faces
Triangular Prism	6	(A)	5
Sphere	(B)	0	1
Cube	8	12	(C)
Triangular based pyramid	4	(D)	4

What are the missing numbers on the table? (A,B,C,D)

$$A = 9 \quad B = 0 \quad C = 6 \quad D = 6$$

# 54

Look at the rectangle below.

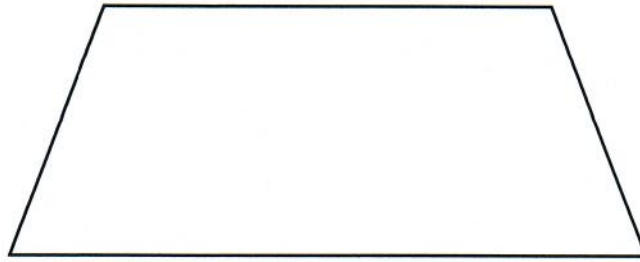


What is the size of angle x and y?

$$x = 90^\circ \quad y = 270^\circ$$

55

Look at the shape below.

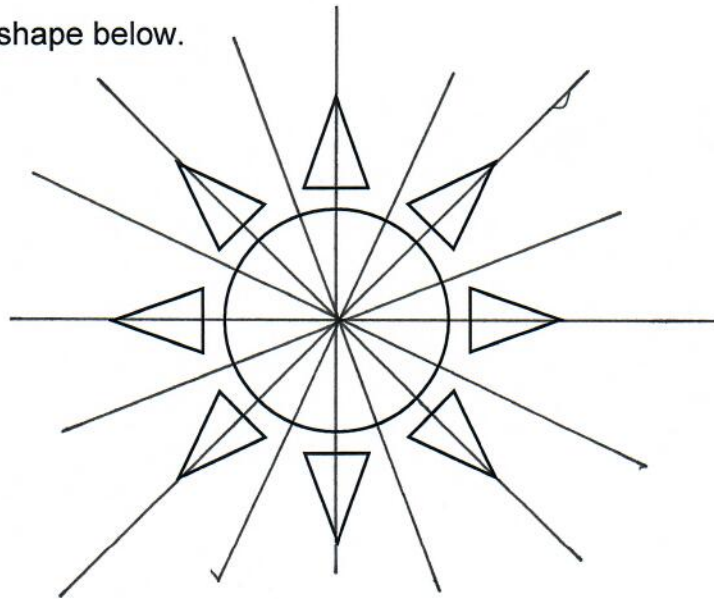


How many sets of parallel lines and how many sets of perpendicular lines does this shape have?

parallel = 1  
perpendicular = 0

56

Look at the shape below.



How many lines of symmetry does the shape have?

8