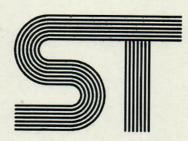
# STIRLING TUITION SEAG Entrance Assessment



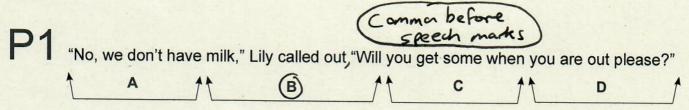
STIRLING TUITION
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Practice Paper 22

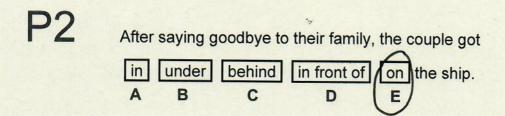
(Cut Answer Sheet from Back Page)

# **English – Practice Test**

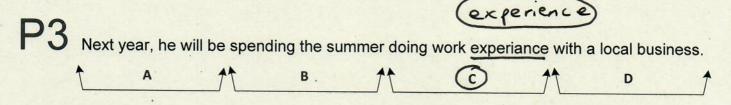
In this question there is either **one** punctuation mistake or **no** punctuation mistake. Find the group of words with the mistake in it and mark its letter on your answer sheet. **If there is no mistake, mark N**.



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.



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.** 



Read this passage to yourself.

#### The Northern White Rhino

The northern white rhino was hunted during the 1970s and 1980s. Poachers hunted them to cut off and sell the rhinos' horns. Rhino horn is highly sought-after in Asia as it is used in traditional medicine in places like China and Vietnam. Rhino horn is now more valuable by weight than gold which makes the animals a popular target for poachers wanting to make money. Northern white rhinos have been extinct in the wild since 2008, only surviving in captivity through conservation projects.

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 rhino horn?

A It is less valuable than gold.

Blt is more valuable than gold.

C It is used in traditional crafts.

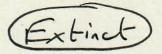
D It is popular in Europe.

E It is extremely beautiful.

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

**P5** 

Which one word from the passage means the same as "no longer living"?



#### **Maths - Practice Test**

**P6** 

A pupil starts reading a book on Monday evening. They read 27 pages each evening from Monday to Friday. On Saturday they read another 16 pages.

How many pages have they read altogether?

A 123

**B** 135

C 169

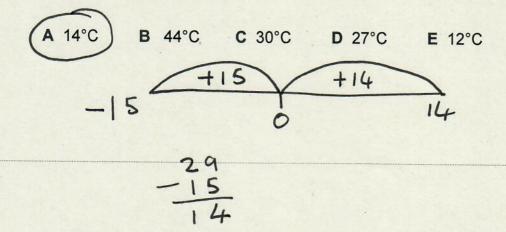
D 185

E 151



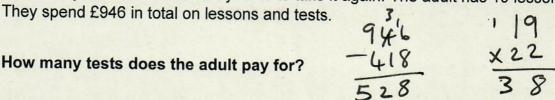
The temperature of a freezer is -15°C. It is switched off. Six hours later the temperature has risen by 29°C.

What is the temperature of the freezer six hours after it is switched off?



#### P8

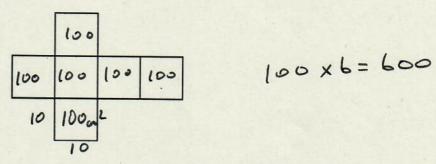
An adult is learning to drive. Each lesson costs £22. It costs £88 to take the driving test. If they fail the test then they have to take it again. The adult has 19 lessons.



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.

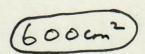
P9

Look at the net below.



The net is folded to form a cube of side 10 cm.

What is the area of the net?



P10 Look at the three time periods below.

Which of the three time periods is the shortest (A-C)?

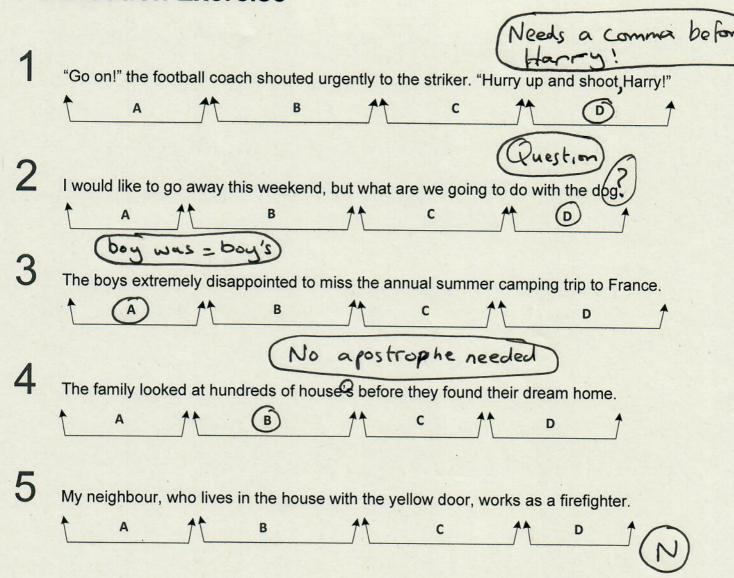


3x60=180

## **English – Main Test**

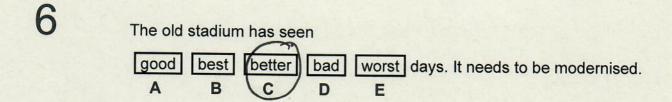
In this exercise there are some mistakes with **punctuation** or use of **capital letters**. On each numbered line there is either **one** mistake or **no** mistake. Find the group of words with the mistake in it and **mark its letter on your answer sheet**. **If there is no mistake, mark N.** 

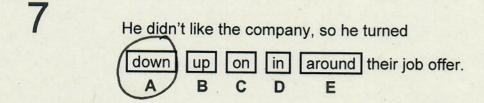
**Punctuation Exercise** 

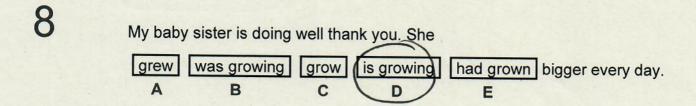


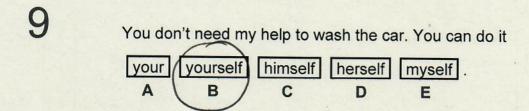
In this exercise you have to choose the **best** word, or **group of words**, to complete each numbered line so that the passage makes sense and is written in correct English. Choose the best answer and **mark its letter on your answer sheet**.

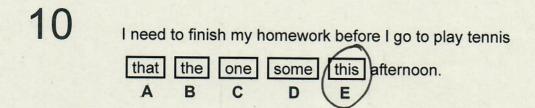
#### **Grammar Exercise**





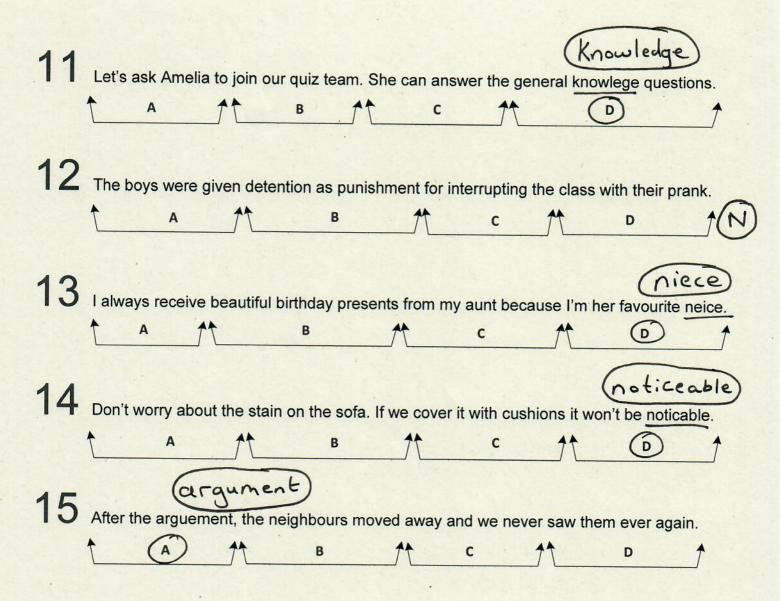






In this exercise there are some **spelling** mistakes. On each numbered line there is either **one** mistake or **no** mistake. Find the group of words with the mistake in it and **mark its letter on your** answer sheet. If there is no mistake, mark N.

#### **Spelling Exercise**



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

#### The Loch Ness Monster

1. The myth of the Loch Ness Monster, or "Nessie" has been around for nearly fifteen

2. hundred years and yet its popularity around the world continues, even in our modern

- 3. era of science and technology. According to the legend, the Loch Ness Monster is a giant
- 4. sea monster that looks like a dinosaur which lives in a lake in Scotland. Supporters of the
- 5. famous monster say its earliest sighting was in AD 565, when Saint Columba banished
- 6. the creature to the lake after saving an unfortunate swimmer from its clutches. Many
- 7. efforts have been made to try and locate the beast yet there is still no scientific
- 8. evidence that it actually exists. Perhaps this is for a good reason? According to science
- 9. the beast, as we imagine it, could not possibly be real.
- 10. Some of those who think that the Loch Ness monster is real, have put forward the
- 11. theory that it is actually a surviving plesiosaur. Plesiosaurs were a long necked marine
- 12. animal that lived during the Triassic and Cretaceous period over sixty million years ago
- 13. According to this theory, the plesiosaur was stranded in the loch after the last Ice Age
- 14. which began around thirty three thousand years ago. However, leading geologist and
- 15. palaeontologist Donald Prothero has rejected this theory. Prothero states that "never
- once has there been a plesiosaur bone found in the lake." Even though scientists have
- 17. explored the loch carefully since the 1970s, no one has ever discovered any bones.
- 18. Prothero goes on to explain that Loch Ness is not big enough for a plesiosaur to live in. It
- 19. is estimated that there are only about twenty two tonnes of fish in the loch. This might
- 20. seem like a lot of fish, but it wouldn't be enough for a hungry plesiosaur who could grow
- up to forty nine feet long (around the same length as a double decker bus!). Prothero
- 22. found another problem with the plesiosaur theory in Loch Ness it would simply be far
- 23. to cold for Nessie! Plesiosaurs were a cold blooded reptile. Reptiles cannot generate
- 24. heat in their bodies so they need to get heat from their surroundings. For example,
- 25. lizards are reptiles and they rely on getting heat from the sun, this is why they can
- 26. usually be found in areas with a warm and sunny climate. Plesiosaurs would have got
- 27. their heat from the water around them and so it would need to have been warm water
- 28. in order for them to survive. However, the water in Loch Ness never gets above five
- 29. degrees Celsius which would be freezing for a tropical creature such as the plesiosaur.
- 30. Despite the scientific evidence, some people believe that they have seen the creature. In
- 31. April 1933, a couple walking around the loch claim to have seen an enormous animal
- 32. rolling and playing in the water. They reported the sighting to a man who worked at the
- 33. loch who also claims to have seen the creature. He described it to be thirty foot long,
- 34. with a six foot long neck and a huge hump. A year later, in 1934, a London doctor
- 35. released a photograph which he claimed was the legendary Loch Ness Monster. The

- (24)
- 36. photograph was published in the Daily Mail newspaper and appeared to show a strange
- 37. head and neck sticking out of the loch. The picture was thought to be the best
- 38. photographic evidence of the monster's existence until 1994, when it was proved to be
- 39. a fake. Apparently the figure in the photograph was, in fact, a modelled wooden head
- 40. attached to a toy submarine!
- 41. So why does the legend of the Loch Ness Monster remain so popular? As human beings
- we are naturally curious about the world around us and we are always trying to make
- 43. sense of our natural habitat. Throughout history, humans have created stories about
- 44. things in our world which we don't understand. These stories help us to create our own
- 45. answers for mysteries that would otherwise be unexplained. The mystery of the Lech
- 46. Ness monster continues because it is a creative story which feeds our imagination and
- 47. evidence of this can be seen by the number of people who visit the loch each year. In
- 48. 2018, it was calculated that the legend of the Loch Ness monster adds roughly
- 49. £41,000,000.00 to the Scottish economy in a typical year. So, it is safe to say that
- 50. "Nessie" is here to stay, whether she actually exists or not!

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.

Which of these statements is true about the myth of the Loch Ness monster?

A It is unpopular and factual.

- B It is popular and not factual.
- C It is from the modern era.
- D It is based on science.
- E It is only popular in Scotland.
- According to Donald Prothero, why could the Loch Ness monster not be a plesiosaur?
  - A Plesiosaurs are extinct.
  - B Plesiosaurs don't have long necks.
  - C Plesiosaurs are not marine animals.
  - There were no plesiosaur bones found in the loch.
    - E There were no plesiosaurs found in the loch.
- Which of these is true about reptiles? CHOOSE 2.
  - 1. They get heat from their food.
  - 2. They can generate heat in their bodies.
  - 3 They cannot generate heat in their bodies.
  - 4. They usually live in areas with a cold climate.
  - They get heat from their surroundings.
  - A 1 and 5
  - **B** 3 and 4
  - © 3 and 5
  - D 1 and 4
  - E 2 and 4
- What other reason does Donald Prothero give for why Loch Ness would not be a suitable home for a plesiosaur?
  - A It is too big.
  - B It is too deep.
  - C It is too warm.
  - D It doesn't have any fish.
  - E It doesn't have enough fish.

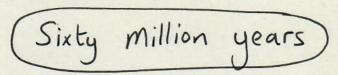
-	-15/
	1
	ш
A STREET, SQUARE, SQUA	4

Which of these is true about the photograph of the Loch Ness monster?

- A It was proved to be a fake.
- B It was published in a book.
- C It was taken from a submarine.
- D It was released by a fisherman.
- E It was proved to be real.
- What reason does the writer give for the popularity of the legend of the Loch Ness monster?
  - A It is scary.
  - B It is true.
  - C It is imaginative.
    - D It is historical.
    - E It is amusing.
- 22 Into which category of writing would you place this passage?
  - Ainformational writing
    - **B** biography
    - C humorous writing
  - D drama
  - E fiction

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

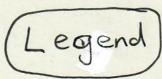
How many years ago did plesiosaurs live?



In which newspaper was the photograph of the Loch Ness monster printed?

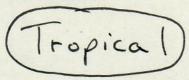
Daily Mail

In line 1 the word "myth" is used. Find ONE other word of similar meaning in lines 1-9.



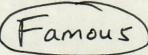
26

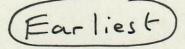
Which word from lines 28-29 tells us that the plesiosaur was a creature commonly found in warm waters?

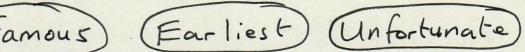


27

Look at the sentence, "Supporters of the mythical monster say..." (lines 4-6). Write all the adjectives in this sentence.

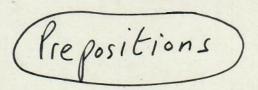






28

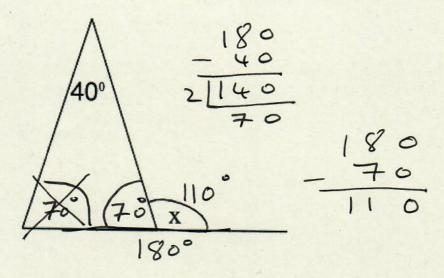
Which one part of speech are the following as they appear in the passage? during (line 12) over (line 12) in (line 13) around (line 14)



## Maths - Main Test

29

Look at the shape below. The triangle is an isosceles triangle.



What is the size of angle x?

A 70°

B 140°



**D** 180°

E 290°

What is the total number of days in November, August, June and February (Not a leap year)?

A 122

**B** 118

C 121

E 120

Look at the number pattern below. 1 ×4 ×4 ×4 ×4 ×4 ×4 16 64 256

If the pattern continued, how many numbers in this pattern are three-digit numbers?

A 12

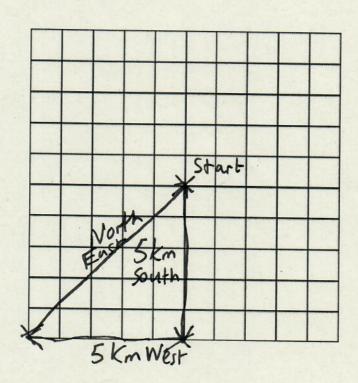
**B** 8

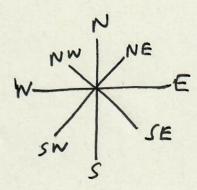
C 2

32

A hiker goes for a walk.

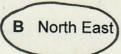
They start walking South for 5 km then they turn and walk West for 5 km.





In which direction must they now walk in order to go directly back to the starting point?

A North



C South

D South East

E North West

$$9^2 \times 6^3 =$$

$$9x9=81$$
 $6x6x6=216$ 

07.

216 81

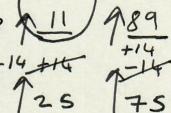
What is the answer to the above calculation?

## 34

At the start of an event, 100 people are in a hall. Each person is either sitting or standing. Some time later 14 people that were sitting, stand up. Now three quarters of the hall are sitting.

3 4 100 = 75

How many people were standing at the start of the event?



Stand



#### 35

A pupil has a guitar lesson each week for six weeks. Each lesson lasts the same length of time. They attend for a total of 4 hour 42 minutes.

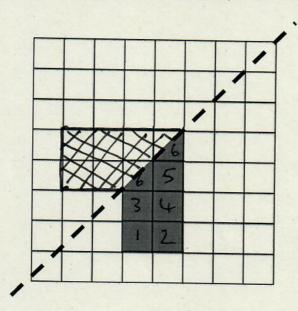
How long does each lesson last in minutes?

What is the least number of coins they can use to pay the exact cost of the sweets?

- C 5
- **D** 3
- E 7



Look at the grid below. Each square on the grid has side 1cm. A diagonal mirror line is shown on the grid. A shaded shape is drawn on the grid.



6×2=12

If the shaded shape is reflected in the mirror line, what is the total area of the shaded shape and its reflection?

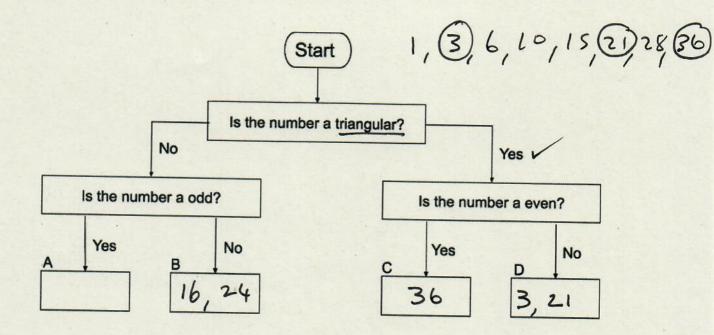
- A 6cm<sup>2</sup>
- B 8cm<sup>2</sup>
- C 12cm<sup>2</sup>
- **D** 10cm<sup>2</sup> **E** 9cm<sup>2</sup>

How many two-digit whole numbers are less than 30?

- A 21
- **B** 18
- C 19
- **D** 30

3 16 21 24 36

Now look at the decision tree below.



One of the 5 numbers in the rectangle above goes in box C.

#### Which number?

A 3

**B** 16

C 21

D 24

E 36

Look at the two diagrams below.

5x5=25

Diagram 1 contains six shaded squares. The fraction of shaded squares in Diagram 2 should be equivalent to the fraction of shaded squares in Diagram 1.

How many squares should be shaded in Diagram 2?

A 10 (B 15) C 25 D 8 E 20

41

100-95=5%.

E 23731

There are 24,980 spectators at the football. Of these spectators 95% are male.

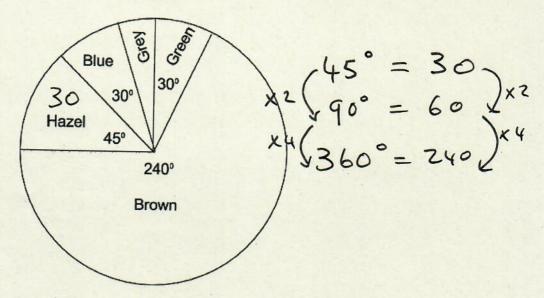
How many spectators are female?

A 9585 B 2748 C 24894 D 1249

-100 of 24989 =

249.8 × 5

Isla asks a number of adults about the colour of their eyes. She draws the pie chart below.



She finds out that 30 adults each had Hazel eyes.

How many adults in total did Isla ask?

A 315

**B** 135

C 300

E 125

#### 43

Look at the fraction below. The denominator of this fraction is 21 and the numerator is 15.

$$\frac{15}{21} - 10 = 5$$

The numerator of an equivalent fraction is 10 less than the numerator of the fraction above.

What is the denominator of the equivalent fraction?

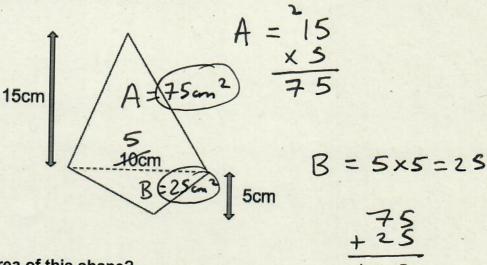
A 14

**B** 3

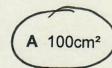
**C** 63

**D** 10





What is the area of this shape?



**B** 25cm<sup>2</sup>

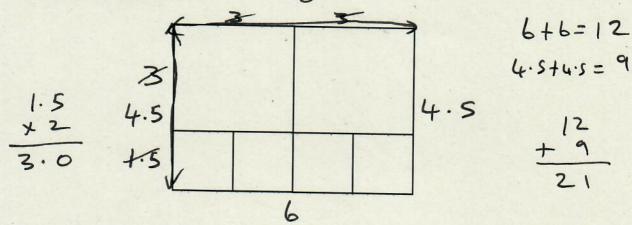
C 750cm<sup>2</sup>

D 200cm<sup>2</sup>

E 30cm<sup>2</sup>

45

Below are six squares. The bigger squares have a side length which is double that of the smaller squares.



The length of the side of a smaller square is 1.5 cm.

What is the perimeter of the shape?

A 27cm

B 4.5cm

C 21cm

D 24cm

E 9cm

A child's dad gives them some money to buy sweets. The child buys the sweets costing £2.73. They now have seven-tenths of the money left.

How much money did the child's dad give her?

A £1.91

B £3.90

E £5.14

= £2.73 3[2.73]  $91\times10 £9.10$ 

47

Pupil One, Pupil Two and Pupil Three are in a relay team for a race. Pupil One finished his leg of the race in 3 minutes and 27 seconds. It took Pupil Two 28 seconds less than Pupil One to finish his leg of the race. Their relay team completed the whole race in 9 minutes and 44 seconds.

How long did it take Pupil Three to finish their leg of the race in seconds?

A 212 B 198 C 92 D 147 E 173 
$$\frac{207}{179}$$
 $3 \times 60 = 180$   $287$   $9 \times 60 = 540$   $386$ 
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48

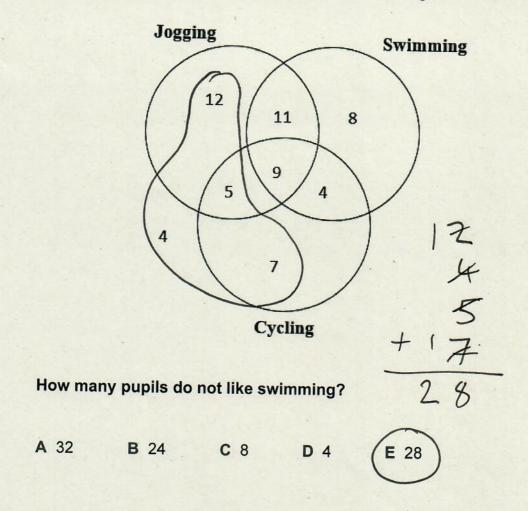
A cube has a volume of 156cm3. A pupil is estimating the length of one side of the cube. They must choose one of the five estimates below.

- A. The length is between 2cm and 3cm
- B. The length is between 3cm and 4cm
- C. The length is between 4cm and 5cm
- D. The length is between 5cm and 6cm
- E. The length is between 6cm and 7cm

Which letter represents the best estimate?

AA BB CC DD EE

Isla investigated the types of exercise people like to do. Isla asks the people in Bloomfields shopping centre and draws the Venn Diagram below.



50

40 people are coming to a barbecue at an adult's house. They plan to cook burgers and want to have enough for 3 burgers for each person, including themselves. Burgers are sold in packets of 8.

What is the least number of packets of burgers they should buy?

A 15

**B** 8



**D** 5

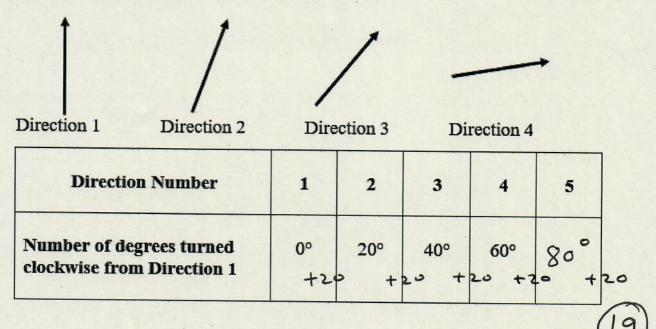
E 43

×3

015 +3 8/1243 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 four arrows below. Direction 1 points vertically upwards. Direction 2 is 20° clockwise from Direction 1. Direction 3 is 20° clockwise from Direction 2, and so on. This information is summarised in the table below.



What is the smallest direction number for which the arrow will again point

vertically upwards after Direction 5?							r	1	1 -	1,01			
6	7	8	9	10	111	12	1 '				17		Comment of the Commen
100	120	140	160	180	200	220	240	260	280	300	320	340	360

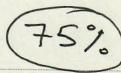
Look at the equation below:

Using the equation above what is the answer to the equation below?

Each day Annie sleeps for 6 hours. A day is 24 hours.

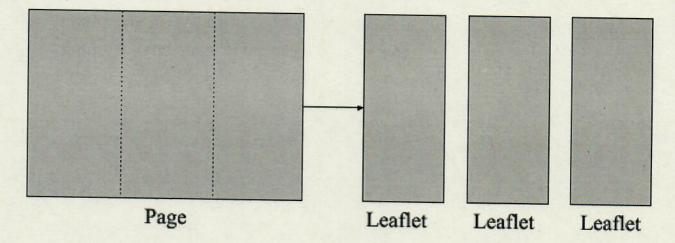
For what percentage of the day is she awake?

$$\frac{18}{24} = \frac{9}{12} = \frac{3}{4}$$



54

A rectangular page is 0.1 mm thick. It is cut into thirds to make three leaflets as shown below. The three leaflets are rectangular and identical in size.



Leaflets made from 1000 pages are stacked in a vertical pile. ÷10

| Cm = 10mm

What is the total height of the pile in centimetres?

A plane has 42 seats in first class and 36 rows of seats in economy class.

There are 12 seats in each row in economy class.

The plane flies to America with 24 empty seats.

If every passenger has a seat, what is the total number of passengers on the plane?

36 ×12 72 3,60

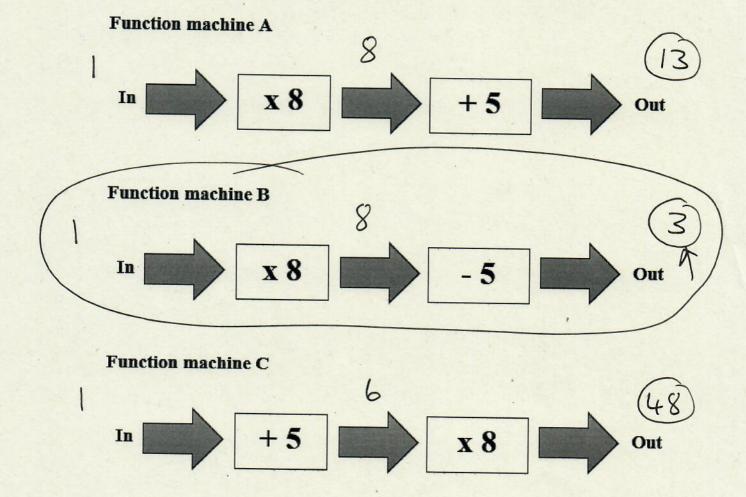
432 + 42 474

474 - 24 450

(450)

56

Look at the function machines below.



The same positive number is inputted into each function machine.

Which function machine will always output the smallest number (A-C)?