

Do not turn over or open this booklet until told to do so

CEA

Common Entrance Assessment

Paper 1

Saturday 13 November 2010

Time: 1 Hour

Please fill in the following from your admission card:

Your Candidate Number _____

Your Assessment Centre _____

Your Date of Birth _____

Answer all 58 questions in this booklet

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MATHEMATICS

Page	Marks	Score	Check	
1	(2)			
2	(3)			
3	(3)			
7	(2)			
8	(4)			
9	(2)			
13	(2)			
14	(2)			
15	(3)			
16	(1)			
20	(4)			
21	(4)			
TOTAL 32				

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ENGLISH

Page	Marks	Score	Check	
4	(2)			
5	(5)			
6	(2)			
10	(1)			
11	(3)			
12	(1)			
17	(2)			
18	(6)			
19	(2)			
22	(2)			
23	(6)			
TOTAL 32				
TOTAL SCORE				

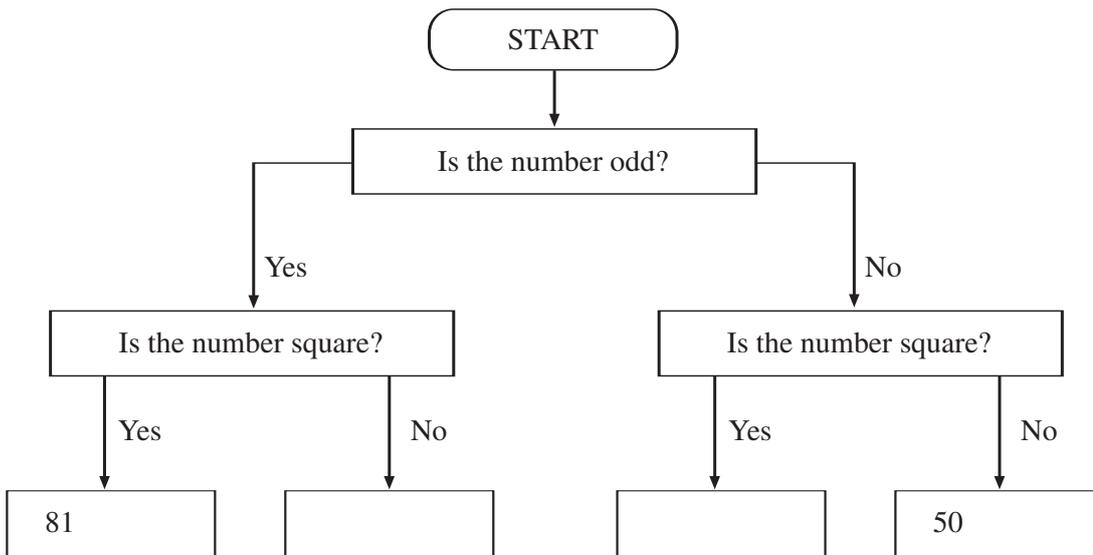
1. The temperature in London is 11°C and the temperature in Moscow is -18°C . What is the **difference** between the 2 temperatures?
Write your answer in the space below.

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

2. Look at the **6 numbers** in the box below.

20	25	45
50	64	81

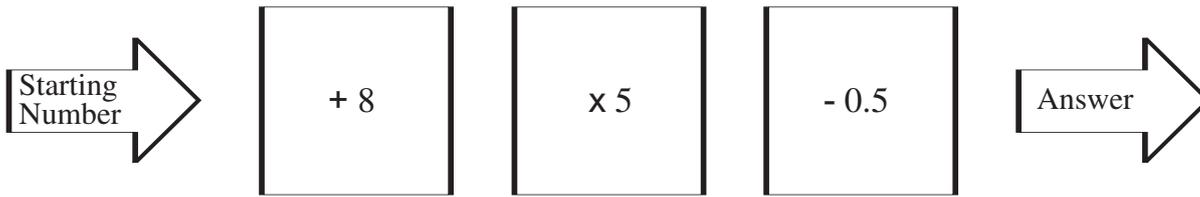
Now look at the decision tree below.



Write **each of the numbers** in the **correct box** of the decision tree.
Two of the numbers have already been **put in the correct boxes**.
Write each of the remaining numbers in the correct box. You may have more than one number in a box.

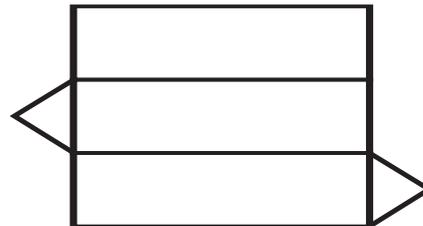
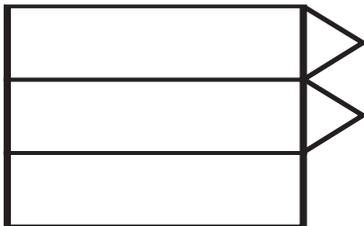
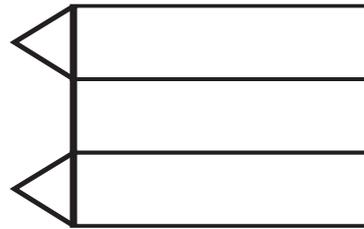
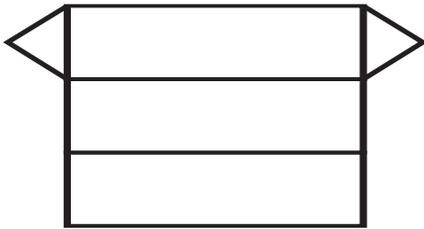
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3. Look at the function machine below.



What answer does this function machine give when the **starting number** is 12? Write your answer in the space below.

4. Two of the 4 figures below **could be** the net of a triangular prism. Circle the 2 figures that could be nets of a triangular prism.



5. The pairs of fractions in (a) and (b) below are **equivalent fractions**. Write the **missing numbers** in the boxes.

(a) $\frac{3}{\square} = \frac{9}{15}$

(b) $\frac{\square}{9} = \frac{35}{63}$

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Grandma Was Eaten by a Shark

Grandma was eaten by a shark,
Dad, by a killer whale,
And my baby brother got slurped up,
By a rather hungry sea snail.

A cuttlefish cut my mum to bits,
An octopus strangled my sister,
A jellyfish stung my auntie's toes,
Giving her terrible blisters.

A puffer fish poisoned my grandpa,
A dogfish ate my cat,
And then a catfish ate my dog,
I was very upset about that.

So you go for a swim if you like,
Just don't ask me to come too,
I'm staying here with my camera,
I can't wait to see what gets you!

Andrea Shavick

9. Look at the **three words** below. Which word **best** describes the poem?
Select the word by ticking a box below.

serious

humorous

factual

10. **Where** do all the creatures in the poem **live**? Tick the correct answer below.

in the sky

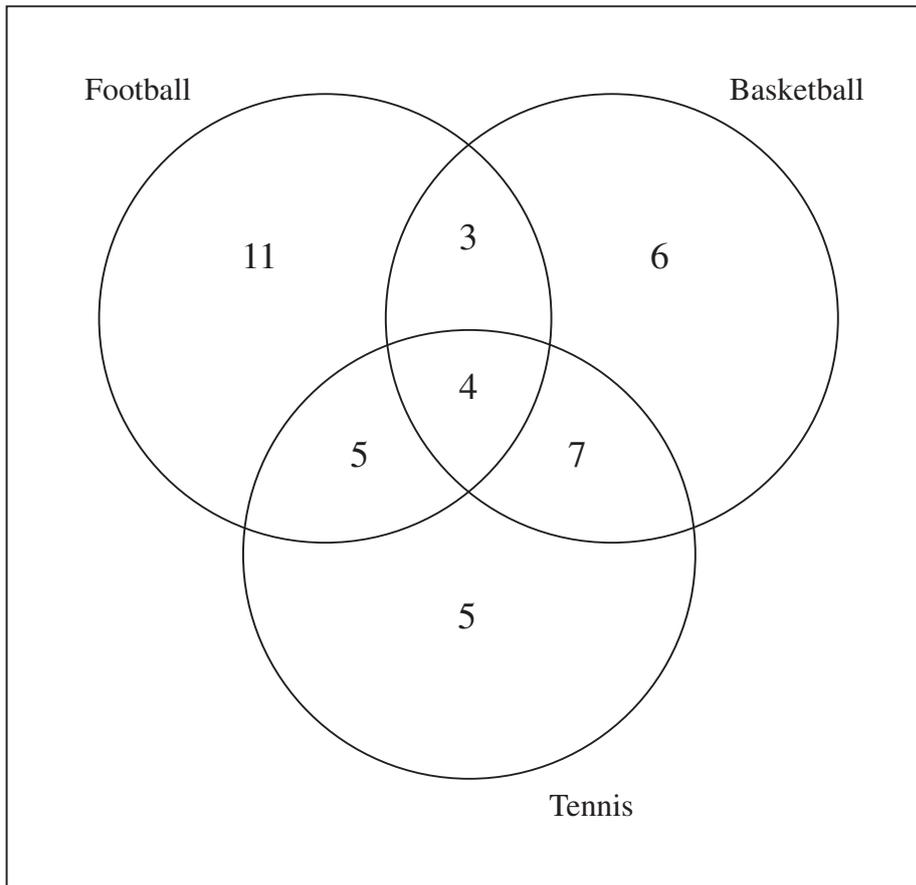
in the forest

in outer space

in the sea

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16. A youth club has facilities for **football**, **basketball** and **tennis**.
The Venn diagram below shows the number of youth club members who play these sports.



How many members play basketball **and** tennis **but not** football?
Write your answer in the space below.

17. Look at the numbers below. Tick the number in which **5** stands for **five tenths**.

409.15

315.3

267.5

153.8

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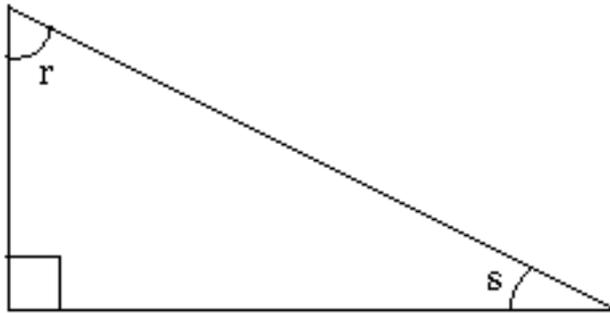
18. The **normal** price of a games console is **£190**. In a **sale** it is **reduced by 25%**. **How much does Pamela pay** for it in the sale?
Write your answer in the space below.

£ _____

19. In **2011** the **8th October** will fall on a **Saturday**. **What day** will the **8th November 2011** fall on? Write your answer in the space below.

20. What is **half of 9.2**? Write your answer in the space below.

21. Look at the **right-angled triangle** below.



Angle **r** is **50° bigger than** angle **s**. What is the size of angle **s**?
Write your answer in the space below.

_____°

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22. Mr Danker makes chocolates. He has **391 chocolates**. He wants to put the chocolates in 23 boxes. Each box must contain the **same number of chocolates**. Look at the 4 calculations below. Tick the calculation Mr Danker must do to work out **how many chocolates go in each box**.

391 - 23

23 ÷ 391

391 ÷ 23

23 - 391

23. Look at the **2 times** below. Write each as a **24 hour clock** time. Write your answers in the spaces below.

3.15 a.m. _____

7.45 p.m. _____

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The letter that you are about to read contains five errors. Read the letter and then answer the questions that follow it.

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School Swimming Lessons

Dear Headmaster, (line 1)

I am one of your pupils, and this is the first letter to you that Ive ever (line 2)

written. I would like to talk to you about our swimming lessons. (line 3)

I think that they are too short. We only get thirty-five minutes (line 4)

and buy the time we get changed in and out of our clothes, there (line 5)

is no time for swimming. (line 6)

Also, I think that the pool is in bad condision. The sides are very (line 7)

slippery and the pool does not get cleaned very often. (line 8)

I hope that you don't think that I am moaning just for the sake of it, (line 9)

My friends agree with me and think that I should write to you. (line 10)

I would like you to think about what I have to say. Do you think (line 11)

that you might speak to me about this. (line 12)

Thank you for your time. (line 13)

Yours faithfully, (line 14)

Peter Smith (line 15)

24. Each line of Peter's letter is numbered. In one line of the letter a question mark is needed instead of a full stop. Tick the number of the line where a question mark is needed.

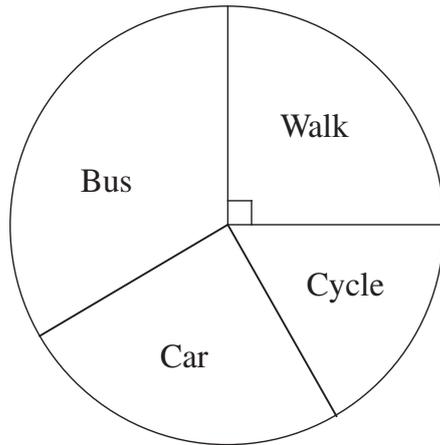
line 6

line 8

line 11

line 12

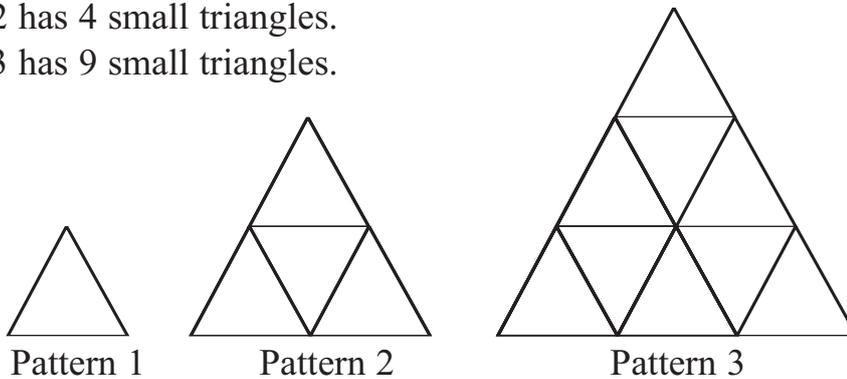
31. The pie chart below shows how **100 children** travel to school each day.



The number of children who travel to school **by car** is **19**.
Twice as many travel to school **by bus** as by car. **How many children cycle** to school? Write your answer in the space below.

32. Look at the sequence of **3 patterns** below. In each pattern small **triangles** are used to make **bigger triangles**.

Pattern 1 has 1 small triangle.
 Pattern 2 has 4 small triangles.
 Pattern 3 has 9 small triangles.



Look at the table below for the number of small triangles in each pattern.

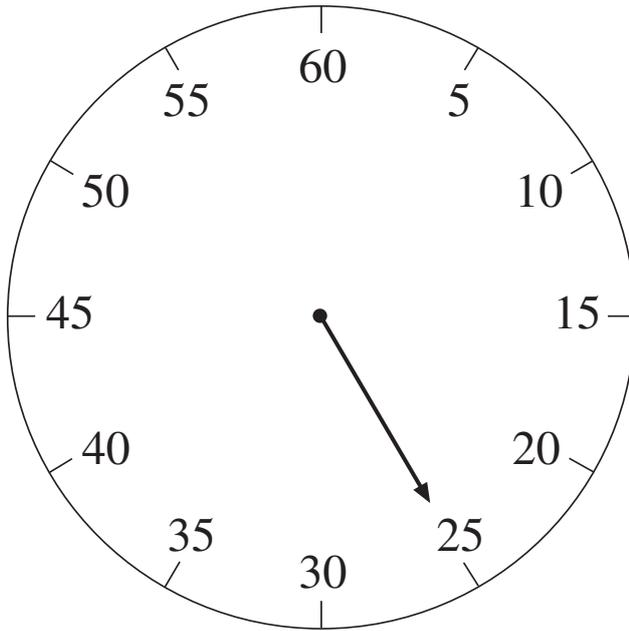
Pattern	1	2	3
Number of small triangles	1	4	9

How many **small triangles** are there in **Pattern 5**? Write your answer in the space below.

_____ small triangles.

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36. Look at the stopwatch below.



The hand on this stopwatch is pointing to **25**. The hand now moves **clockwise** through 240° . What **number** will the hand be pointing to after turning clockwise through 240° ? Write your answer in the space below.

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The Boy Who Dropped Litter

‘ANTHONY WRIGGLY
SHAME ON YOU!’
screached the teacher
as she spotted him
scrunching up his crisp packet
and dropping it carefully
on to the pavement outside school.

‘If everyone went around
dropping crisp packets like you do
where would we be?’

(Anthony didn’t know, so she told him)

‘We’d be wading waist-high in crisp packets,
that’s where!’

Anthony was silent.
He hung his head.

It looked to the teacher
as if he was very sorry.

When in fact he was trying to calculate
just how many packets it would take
to bring Basildon to a complete standstill.

Lindsay MacRae

37. Look at the **four words** below. All four words appear in **verse one** of the poem. Tick the **two words** which tell us what **Anthony Wiggly** does.

- dropping
- screached
- scrunching
- spotted

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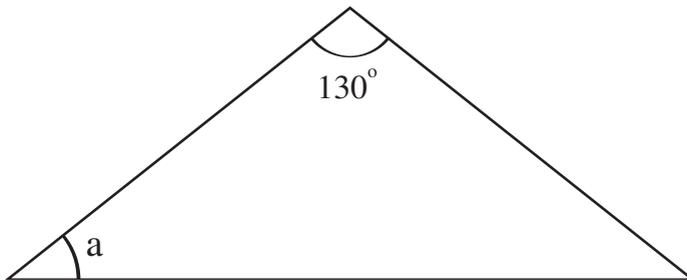
44. Sugar costs **£4.90 per kilogram**. How much would **400 g** cost?
Write your answer in the space below.

£ _____

45. Look at the sequence of numbers below. **Complete the sequence** by writing the correct numbers in the **2 spaces** below.

____, 111, 115, 120, 126, 133, ____

46. The **triangle** below is **isosceles**.



Calculate the value of the angle **a**. Write your answer in the space below.

_____ °

47. The table below shows the times taken by 4 girls in the sprint event at a school sports day.

Girl	Time (seconds)
Ellen	19
Niamh	21
Laura	19
Andrea	17

What is the **mean** (average) time taken by the 4 girls? Write your answer in the space below.

_____ seconds

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48. Look again at the times taken by the 4 girls in the previous question. What is the **range** for these times? Write your answer in the space below.

_____ seconds

49. Paul's car has run out of petrol. The petrol tank on Paul's car holds **50 litres** of petrol. Petrol costs **£1.25 a litre**. **How much does it cost** Paul to **fill the tank** with petrol? Write your answer in the space below.

£ _____

50. Look at the bus timetable below.

	Bus A	Bus B	Bus C	Bus D
Belfast	07:11	08:11	09:11	10:11
Banbridge	07:49			10:52
Newry	08:12	09:02	09:56	
Dundalk	08:44		10:32	11:37
Drogheda	09:15	10:09	11:08	12:13

How long does **Bus A** take to travel from **Banbridge** to **Drogheda**? Give your answer **in minutes**. Write your answer in the space below.

_____ minutes

51. **Which** of the **4 buses** takes the **shortest time** to travel from **Belfast** to **Drogheda**? Give your answer by writing **A, B, C** or **D** in the space below.

Bus _____

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