Candidate Name	Centre Number	Candidate Number
		0

GCSE

MATHEMATICS
UNIT 1: NON-CALCULATOR
FOUNDATION TIER

2nd SPECIMEN PAPER SUMMER 2017

1 HOUR 30 MINUTES

ADDITIONAL MATERIALS
The use of a calculator is not permitted in this examination.
A ruler, protractor and a pair of compasses may be required.

INSTRUCTIONS TO CANDIDATES
Write your name, centre number and candidate number in the spaces at the top of this page.

Answer **all** the questions in the spaces provided in this booklet.

Take π as 3·14.

INFORMATION FOR CANDIDATES

You should give details of your method of solution when appropriate.

Unless stated, diagrams are not drawn to scale.

Scale drawing solutions will not be acceptable where you are asked to calculate.

The number of marks is given in brackets at the end of each question or part-question.

The assessment will take into account the quality of your linguistic and mathematical organisation, communication and accuracy in writing in question **8.**

For Examiner's use only
Question	Maximum Mark	Mark Awarded
1.	6	
2.	3	
3.	2	
4.	2	
5.	2	
6.	5	
7.	5	
8.	7	
9.	5	
10.	3	
11.	4	
12.	4	
13.	5	
14.	7	
15.	5	
TOTAL	65	

Formula list

Area of a trapezium = $\dfrac{1}{2}(a+b)h$
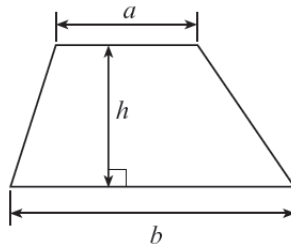
1. *(a)* Write the number 6 342 000 in words. [1]

……………………………………………………………………………………………………

……………………………………………………………………………………………………

(b) Write the number fifty–three thousand and six in figures. [1]

……………………………………………………………………………………………………

(c) What is the sum of 647 and 285? [1]

……………………………………………………………………………………………………..

……………………………………………………………………………………………………..

……………………………………………………………………………………………………..

(d) Write down the multiple of 8 which lies between 50 and 60. [1]

……………………………………………………………………………………………………

(e) Write down all the factors of 21. [2]

……………………………………………………………………………………………………

2. *(a)* Measure and write down the length of the line *AB*.
Clearly state the units you are using. [2]

B

A
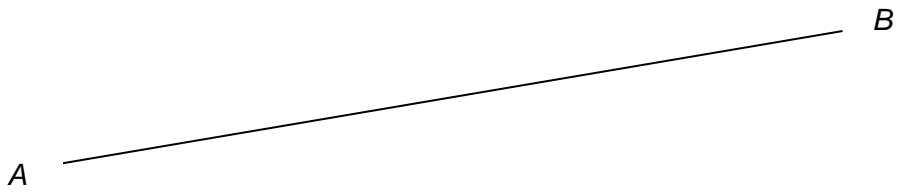
Length of *AB* = ……………………………………

(b) In the space below, draw a circle with diameter 8 cm. [1]

3. Using each of the numbers 6, 7, 8 and 9 once only, fill in the blanks to make each statement correct. [2]

(a) $\boxed{}$ × $\boxed{}$ − 5 = 43

(b) 36 ÷ $\boxed{}$ + $\boxed{}$ = 11

....

....

....

....

4. (a) Jonny travelled from Holyhead to Swansea.
Circle the answer which shows the best metric unit to measure the distance he has travelled. [1]

centimetre   mile   metre   kilometre   millimetre

(b) Rosie wanted to cook leek soup for St David's Day.
She needed to buy 3 kg of leeks for her recipe.
Circle the answer which gives the best approximation in pounds (lbs) for that weight of leeks. [1]

6 lb   3.3 lb $\frac{1}{3}$ lb   30 lb   6.6 lb

....

....

....

5. Ifan has a bag with red and green balls in it.
There are 40 red balls and 60 green balls.
Ifan chooses one ball at random from his bag.

On the probability scale below, mark the points A and B where:

A is the probability that Ifan chooses a green ball,

B is the probability that Ifan chooses a yellow ball. [2]

```
   ┌──────────────────────┬──────────────────────┐
   0                                             1
```
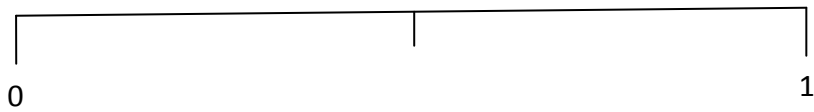
6. Lucy recorded the number of times some football teams in the Welsh Alliance League won a match during a season. The teams were Bethesda Athletic (B), Caernarfon Town (C), Llanberis (L) and Nefyn United (N).

The data she collected is shown below.

B   B   N   C   C   C   L   C   N   L   B   C   C   C   C   L   B   B   C   N   N   C   B

(a) Complete the following table using the above data. [2]

Football team	Tally	Frequency
Bethesda Athletic (B)	𝒯𝐻𝐿 𝐼	
Caernarfon Town (C)		
Llanberis (L)		
Nefyn United (N)		

(b) Draw a suitable graph to show this data on the grid below. [3]
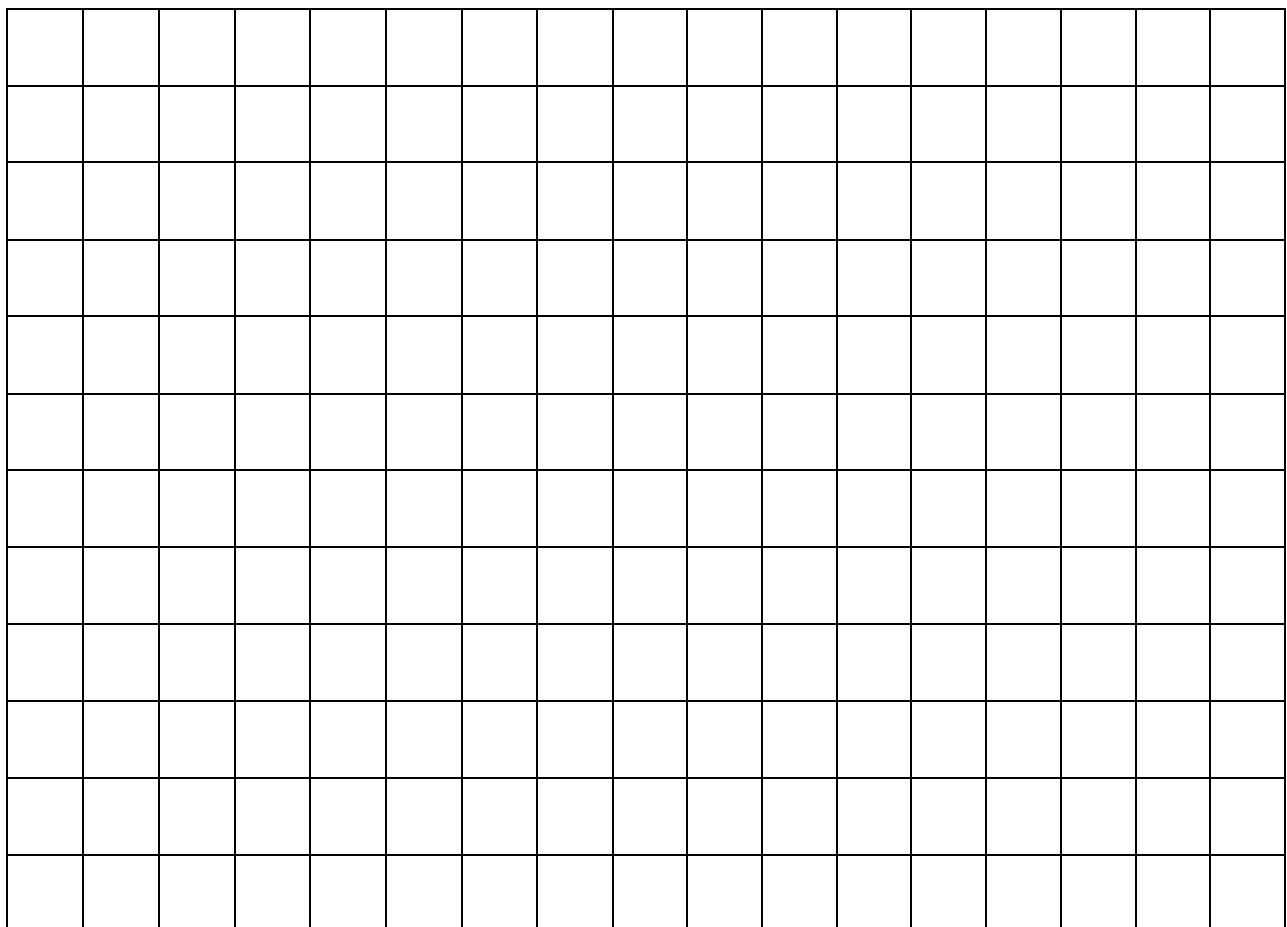
7. *(a)* Work out 3% of £800. [2]

…………………………………………………………………………………..……………..

…………………………………………………………………………………………..………

....

…………………………………………………………………………………………………..

(b) Work out $\frac{2}{5}$ of 450. [2]

…………………………………………………………..…………………………………………..

…………………………………………………………………………………………..………

....

…………………………………………………………………………………………………..

(c) Simplify 16*h* − 18*h* + 9*h*. [1]

………...

8. *You will be assessed on the quality of your organisation, communication and accuracy in writing in this question.*

Hussein has a set of scales.
He has some weights which are labelled A, B and C.
Hussein places different weights on his scales three times so that they balance each time.
Find the values of A, B and C.

[5 + OCW 2]

....

....

....

....

....

....

....

....

....

....

A = ...kg   B = ...kg   C = ...kg

9. *(a)* Find the size of angle x. [2]
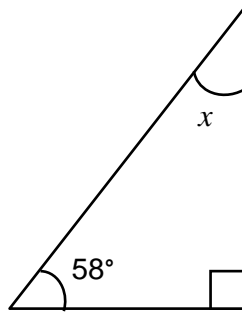
Diagram not drawn to scale

....

....

....

x = ...°

(b) ABC is an isosceles triangle with *AB = AC* and *BÂC* = 34°.
BCD is a straight line.
Find the size of *AĈD*.

[3]
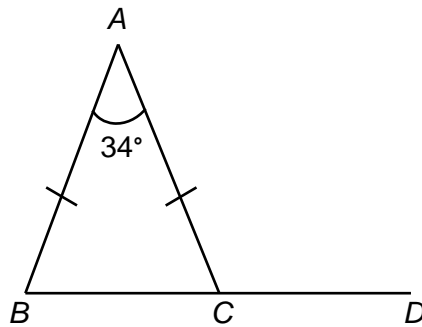
Diagram not drawn to scale

....

....

....

....

AĈD = ...°

10. Circle the correct answer for each of the following statements.

(a)   0·2 is equivalent to

     2%   20%   0·2% $\frac{1}{5}$% $\frac{2}{10}$%

                                                                                         [1]

(b)   5·4 − 2·16 is equal to

     2·24   3·24   3·34   3·36   7·56

                                                                                           [1]

(c) $\dfrac{5}{6} - \dfrac{1}{3}$ is equal to

     $\dfrac{51}{63}$ $\dfrac{4}{3}$ $\dfrac{1}{2}$ $\dfrac{4}{6}$ 0·43

                                                                                          [1]

11. Sian states,

'When a fair coin is tossed and a fair dice is thrown,

the probability of getting a head and an even number is $\frac{1}{2}$.'

Is Sian correct?
You must show enough working to justify your answer.

[4]

....

....

....

....

....

....

....

....

12. *(a)* A rectangle, *R*, has sides of 5 m and 3 m.

Draw a sketch of a different rectangle that has the same perimeter as rectangle *R*.
Write down the length of each of the four sides of your rectangle.

[2]

(b) Both the length and width of rectangle *R* are exactly doubled.
Does this mean that the area is also exactly doubled?
You must show enough working to justify your answer.

[2]

....

....

....

....

....

....

....

13. Solve each of the following equations.

(a) $\dfrac{x}{4} = 8$ [1]

....

....

....

....

(b) $\dfrac{7}{x} = 14$

[1]

....

....

(c) $9x + 4 = 2x + 39$ [3]

....

....

....

....

15. A right-angled triangle *ADE* is attached to a trapezium *ABCD* as shown below.
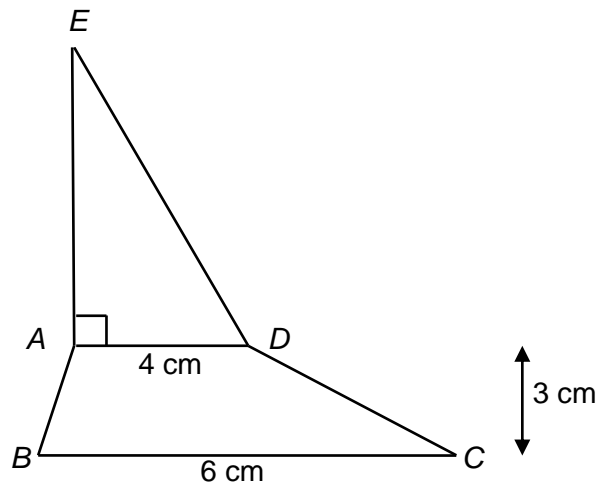
Diagram not drawn to scale

AD = 4 cm, *BC* = 6 cm, and the perpendicular height of the trapezium is 3 cm.
The triangle and the trapezium have equal area.

Calculate the length of *AE*. [5]

....

....

....

....

....

....

....

....

....

....

....

....

END OF PAPER