Paper Reference ANM20/2A
Pearson
Edexcel Award

Number and Measure
Level 2
Section A (Calculator)

Thursday 3 May 2018 − Morning

Time: 1 hour plus your additional time allowance.

In the boxes below, write your name, centre number and candidate number.

Surname	
Other names	

Centre Number					
Candidate Number					

Y56878A

YOU MUST HAVE

Ruler, protractor, writing and drawing equipment. Calculator.

YOU WILL BE GIVEN

Diagram Book

INSTRUCTIONS

Answer **ALL** questions.

Answer the questions in the spaces provided in this Question Paper or on the separate diagrams – there may be more space than you need.

CALCULATORS MAY BE USED.

If your calculator does not have a π button, take the value of π to be $3 \cdot 142$ unless the question instructs otherwise.

INFORMATION

The total mark for this section is **50**

The marks for EACH question are shown in brackets – use this as a guide as to how much time to spend on each question.

There may be spare copies of some diagrams.

ADVICE

Read each question carefully before you start to answer it.

Keep an eye on the time.

Try to answer every question.

Check your answers if you have time at the end.

Section A

Answer ALL questions.

Write your answers in the spaces provided.

You must write down ALL the stages in your working.

1. **Look at diagrams (i) and (ii) for Question 1 in the Diagram Book. Write down the numbers marked with the arrows ($\longrightarrow$)**

   (i) _____

   (ii) _____

(Total for Question 1 is 2 marks)

2.   (a) **Find the value of**

$$45^3$$

(1 mark)

_____

(continued on the next page)

2.   continued.

(b) Work out the value of

$$\sqrt{13^2 - 12^2}$$

(2 marks)

_____

(Total for Question 2 is 3 marks)

Turn over

3. (a) **Work out**

   −5 + −2

   (1 mark)

   _____

   (b) **Work out**

   −7 − −5

   (1 mark)

   _____

(Total for Question 3 is 2 marks)

Turn over

4. (a) Work out

$$72 \cdot 5 \times 3 \cdot 91$$

(1 mark)

_____

(continued on the next page)

4.   continued.

Sioned bought a pack of 8 batteries for £3·75

(b)   Work out the cost of one of these batteries.

Give your answer to the nearest penny.

(2 marks)

_____

(Total for Question 4 is 3 marks)

5.   Look at the diagram for Question 5 in the Diagram Book.

It shows a pie chart.

The students in Cathy's class were each asked to name their favourite vegetable.

Cathy's pie chart shows the results.

4 students said that carrots are their favourite vegetable.

5 students said that potatoes are their favourite vegetable.

(continued on the next page)

5. **continued.**

Complete the frequency table below.

There are two spaces to fill.

Vegetable	Frequency
carrots	4
peas	
potatoes	5
broccoli	

(Total for Question 5 is 3 marks)

Turn over

6. Last week Rashmi worked for 40 hours at £9·60 per hour.

He also worked 8 hours overtime at £14·40 per hour.

His deductions were

National Insurance   £12·50

Income tax   £42·63

Work out Rashmi's total pay after these deductions.

(4 marks)

Answer space is on the next page.

6. **continued.**

£ _____

(Total for Question 6 is 4 marks)

Turn over

7.   **Find the Highest Common Factor (HCF) of 24 and 60**

(3 marks)

Answer space continues on the next page.

7. **continued.**

(Total for Question 7 is 3 marks)

8. Look at the diagram for Question 8 in the Diagram Book.

A circle has a radius of **8 cm**

Work out the circumference of the circle.

(3 marks)

Answer space continues on the next page.

8. **continued.**

_____ **cm**

(Total for Question 8 is 3 marks)

9.　Divide **63** in the ratio **5 : 4**

_____

(Total for Question 9 is 2 marks)

10. Thom invests **£200** for **3** years in an account paying simple interest at a rate of **3·5%** per year.

Work out the total amount of simple interest paid to Thom by the end of the **3** years.

(3 marks)

Answer space continues on the next page.

10. continued.

£ _____

(Total for Question 10 is 3 marks)

11. Look at the diagram for Question 11 in the Diagram Book.
It shows a cylinder.

The radius of the cylinder is **3 cm**
The height of the cylinder is **8 cm**

Work out the volume of the cylinder.

(3 marks)

Answer space continues on the next page.

11. continued.

_____cm^3

(Total for Question 11 is 3 marks)

Turn over

12. **Which is bigger**

70% of 75   or $\frac{3}{4}$ of 72?

You must show your working.

(3 marks)

Answer space continues on the next page.

12. continued.

(Total for Question 12 is 3 marks)

13. Look at the diagram for Question 13 in the Diagram Book.

It shows a box in the shape of a prism.

Each end of the prism is a **5**–sided shape, shown shaded in the diagram and below the prism.

The volume of the prism is **72 cm^3**

The length of the prism is **12 cm**

Work out the area of the shaded **5**–sided end.

(2 marks)

Answer space is on the next page.

Turn over

13. continued.

_____cm^2

(Total for Question 13 is 2 marks)

14. Look at the diagram for Question 14 in the Diagram Book.

Work out the area of the shape.

(4 marks)

Answer space continues on the next page.

14. continued.

_____cm^2

(Total for Question 14 is 4 marks)

15. **Work out**

$$3\frac{3}{4} \div 2\frac{1}{2}$$

_____

(Total for Question 15 is 2 marks)

Turn over

16.   Rebecca went on holiday to France.

She changed **£500** into euros.

The exchange rate was

£1 = 1·15 euros.

Work out how many euros Rebecca got.

(2 marks)

Answer space continues on the next page.

16. continued.

_____ **euros**

(Total for Question 16 is 2 marks)

17. On Saturday, **120** people used the cash machine in Michael's shop.

On Sunday, **90** people used the cash machine in Michael's shop.

What is the percentage decrease in the number of people using the cash machine?

(2 marks)

Answer space continues on the next page.

17. continued.

_____**%**

(Total for Question 17 is 2 marks)

18. **Write these seven numbers in order of size.**

Start with the smallest number.

4   −3   0   −2

−4   2   6

_____

(Total for Question 18 is 1 mark)

_____

Turn over

19. Look at the table for Question 19 in the Diagram Book.

    Jose sells bags of potatoes.

    The table gives information about the number of bags and the weight of the potatoes in each bag Jose has to sell.

    Work out the total weight of potatoes that Jose has to sell.

    (3 marks)

    Answer space continues on the next page.

19. continued.

_____ **kg**

(Total for Question 19 is 3 marks)

TOTAL FOR SECTION A IS 50 MARKS

END OF PAPER