

# Paper Reference ANM20/2A

## Pearson Edexcel Award

Total Marks
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# Number and Measure

## Level 2

### Section A

### (Calculator)

Time: 1 hour

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

Surname					
Other names					
Centre Number					
Candidate Number					

**YOU MUST HAVE**

**Ruler, writing and drawing equipment,  
protractor, calculator.**

**YOU WILL BE GIVEN**

**Diagram Booklet**

**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  $\pi$   
button, take the value of  $\pi$  to be  $3.142$   
unless the question instructs otherwise.**

**Turn over**

## **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 in case you need them.**

**You may be provided with a model for Question 4**

**You may be provided with a model for Question 18**

**They are NOT accurate.**

**Turn over**

**ADVICE**

**Read each question carefully before you start to answer it.**

**Try to answer every question.**

**Check your answers if you have time at the end.**

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## **Section A**

**Answer ALL questions.**

**Write your answers in the spaces provided.**

**You must write down all the stages in your working.**

**Turn over**

- 1. (a) Look at the diagram for Question 1(a) in the Diagram Booklet.**

**It shows a dial.**

**Write down the number marked with the arrow.**

**(1 mark)**

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**(continued on the next page)**

**Turn over**

**1. continued.**

**(b) Look at the diagram for  
Question 1(b) in the  
Diagram Booklet.**

**It shows a scale.**

**Write down the number marked  
with the arrow.**

**(1 mark)**

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**(Total for Question 1 is 2 marks)**

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**Turn over**

**2. Work out**

$$20 \cdot 4 \times 15 \cdot 3$$

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**(Total for Question 2 is 1 mark)**

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**Turn over**



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

$$\sqrt{961}$$

**(1 mark)**

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**(continued on the next page)**

**Turn over**

**3. continued.**

**(b) Find the value of**

$$18^3$$

**(1 mark)**

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**(continued on the next page)**

**Turn over**

**3. continued.**

**(c) Work out the value of**

$$3^4 \times 2^5$$

**(2 marks)**

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**(Total for Question 3 is 4 marks)**

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**Turn over**

- 4. Look at the diagram for Question 4 in the Diagram Booklet.**

**You may be provided with a model.**

**They are NOT accurate.**

**They show a prism.**

**Find the volume of the prism.**

**(2 marks)**

**Answer space continues on the next page.**

**4. continued.**

\_\_\_\_\_ **cm<sup>3</sup>**

**(Total for Question 4 is 2 marks)**

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**Turn over**

**5. Look at the diagram for Question 5 in the Diagram Booklet.**

**It shows a triangle.**

**(a) Work out the perimeter of the triangle.**

**(2 marks)**

**Answer space continues on the next page.**

5. (a) continued.

\_\_\_\_\_ metres

(continued on the next page)

5. (b) Work out the area of the triangle.  
(2 marks)

\_\_\_\_\_ m<sup>2</sup>

**(Total for Question 5 is 4 marks)**

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6. (a) Work out

$$9 - -2$$

(1 mark)

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(continued on the next page)

**6. continued.**

**(b) Work out**

$$\mathbf{-12 \div -3}$$

**(1 mark)**

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**(continued on the next page)**

**Turn over**

**6. continued.**

**(c) Work out**

$$18 \times -2$$

**(1 mark)**

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**(Total for Question 6 is 3 marks)**

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**Turn over**

**7. Work out**  
**24% of 500**

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**(Total for Question 7 is 2 marks)**

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**Turn over**

8. Change 14·3 pounds into kilograms.  
(1 kilogram = 2·2 pounds)

\_\_\_\_\_ kilograms

(Total for Question 8 is 2 marks)

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9. Sarah invests £6000 for 2 years in an account paying simple interest at a rate of  $2.5\%$  per year.

Work out the total amount of simple interest paid to Sarah by the end of the 2 years.

(3 marks)

Answer space continues on the next page.

**9. continued.**

**£** \_\_\_\_\_

**(Total for Question 9 is 3 marks)**

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**Turn over**

- 10. Change £350 into Australian dollars.  
Use an exchange rate of  
£1 = 1.90 dollars.**

\_\_\_\_\_ dollars

**(Total for Question 10 is 2 marks)**

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**11. Work out**

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

**(2 marks)**

**Answer space continues on the next page.**

**11. continued.**

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**(Total for Question 11 is 2 marks)**

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**Turn over**

- 12. Last week Sameena worked for 35 hours at £11·50 per hour. She also worked 8 hours overtime at £17·25 per hour.**

**Her deductions were**

<b>Income Tax</b>	<b>£27·05</b>
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<b>National Insurance</b>	<b>£108·10</b>
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**Work out Sameena's total pay after these deductions.**

**(4 marks)**

**Answer space continues on the next two pages.**

**Turn over**

**12. continued.**

**Turn over**

**12. continued.**

**£** \_\_\_\_\_

**(Total for Question 12 is 4 marks)**

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**Turn over**

**13. Look at the diagram for Question 13 in the Diagram Booklet.**

**A circle has a diameter of 11 cm**

**Work out the area of the circle.**

**(3 marks)**

**Answer space continues on the next page.**

**13. continued.**

\_\_\_\_\_ **cm<sup>2</sup>**

**(Total for Question 13 is 3 marks)**

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**Turn over**

**14. Look at the diagram for Question 14  
in the Diagram Booklet.**

**It shows a pie chart.**

**Ben has pens that are black or green  
or red or blue in a box.**

**He counts the number of pens of  
each colour in the box.**

**The pie chart in the Diagram Booklet  
shows Ben's results.**

**(continued on the next page)**



**14. continued.**

**Complete the frequency table below.**

**There are two spaces to fill.**

<b>COLOUR</b>	<b>FREQUENCY</b>
<b>black</b>	<b>56</b>
<b>green</b>	<b>10</b>
<b>red</b>	
<b>blue</b>	

**(Total for Question 14 is 3 marks)**

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**Turn over**

**15. Find the Lowest Common Multiple  
(LCM) of 15 and 18**

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**(Total for Question 15 is 3 marks)**

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**16. Look at the diagram for Question 16  
in the Diagram Booklet.**

**It shows a shape.**

**Work out the area of the shape.**

**(4 marks)**

**Answer space continues on the next  
page.**

**16. continued.**

\_\_\_\_\_ **cm<sup>2</sup>**

**(Total for Question 16 is 4 marks)**

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**Turn over**

**17. In March, the number of trains that arrived late at a station was 550**

**In April, the number of trains that arrived late at the station was 484**

**Work out the percentage decrease in the number of trains that arrived late at the station.**

**(3 marks)**

**Answer space continues on the next page.**

**17. continued.**

\_\_\_\_\_ %

**(Total for Question 17 is 3 marks)**

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**Turn over**

**18. Look at the diagram for Question 18 in the Diagram Booklet.**

**You may be provided with a model.**

**They are NOT accurate.**

**They show a cylinder.**

**The height of the cylinder is 15 cm**

**The radius of the cylinder is 7 cm**

**Work out the volume of the cylinder.**

**(3 marks)**

**Answer space continues on the next page.**

**18. continued.**

\_\_\_\_\_ **cm<sup>3</sup>**

**(Total for Question 18 is 3 marks)**

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**TOTAL FOR SECTION A IS 50 MARKS**

**END OF PAPER**

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