Pearson Edexcel

Mark Scheme (Results)

January 2021

Pearson Edexcel Level 2 Award
In Numberand Measure (ANM20)
Paper 2B

Edexcel and BTEC Qualifications

Edexcel and BTEC qualifications are awarded by Pearson, the UK's largest awarding body. We provide a wide range of qualifications including academic, vocational, occupational and specific programmes for employers. For further information visit our qualifications websites at www.edexcel.com or www.btec.co.uk. Alternatively, you can get in touch with us using the details on our contact us page at www.edexcel.com/contactus.

Pearson: helping people progress, everywhere

Pearson aspires to be the world's leading learning company. Our aim is to help everyone progress in their lives through education. We believe in every kind of learning, for all kinds of people, wherever they are in the world. We've been involved in education for over 150 years, and by working across 70 countries, in 100 languages, we have built an international reputation for our commitment to high standards and raising achievement through innovation in education. Find out more about how we can help you and your students at: www.pearson.com/uk

January 2021
Publications Code ANM20_2B_2101_MS
All the material in this publication is copyright
© Pearson Education Ltd 2021

NOTES ON MARKING PRINCIPLES

1 All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.

2 Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.

3 All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.

4 Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.

5 Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

6 With working

If there is a wrong answer indicated on the answer line always check the working in the body of the script (and on any diagrams), and award any marks appropriate from the mark scheme.
If working is crossed out and still legible, then it should be given any appropriate marks, as long as it has not been replaced by alternative work.
If it is clear from the working that the "correct" answer has been obtained from incorrect working, award 0 marks. Send the response to review, and discuss each of these situations with your Team Leader.
If there is no answer on the answer line then check the working for an obvious answer.
Any case of suspected misread loses A (and B) marks on that part, but can gain the M marks. Discuss each of these situations with your Team Leader.
If there is a choice of methods shown, then no marks should be awarded, unless the answer on the answer line makes clear the method that has been used.

7 Follow through marks

Follow through marks which involve a single stage calculation can be awarded without working since you can check the answer yourself, but if ambiguous do not award.
Follow through marks which involve more than one stage of calculation can only be awarded on sight of the relevant working, even if it appears obvious that there is only one way you could get the answer given.

8 Ignoring subsequent work

It is appropriate to ignore subsequent work when the additional work does not change the answer in a way that is inappropriate for the question: e.g. incorrect cancelling of a fraction that would otherwise be correct

It is not appropriate to ignore subsequent work when the additional work essentially makes the answer incorrect e.g. algebra.

Transcription errors occur when candidates present a correct answer in working, and write it incorrectly on the answer line; mark the correct answer.

9 Parts of questions

Unless allowed by the mark scheme, the marks allocated to one part of the question CANNOT be awarded in another.

10 Range of answers

Unless otherwise stated, when an answer is given as a range (e.g 3.5 – 4.2) then this is inclusive of the end points (e.g 3.5, 4.2) and includes all numbers within the range (e.g 4, 4.1)

Guidance on the use of codes within this mark scheme
M1 – method mark A1 – accuracy mark B1 – Working mark oe – or equivalent cao – correct answer only ft – follow through sc – special case dep – dependent (on a previous mark or conclusion) indep – independent isw – ignore subsequent working

PAPER: ANM20_2B				
Question	**Working**	**Answer**	**Mark**	**Notes**
1		−5,−3,−2, −1,2,4,6,9	1	B1 cao
2		16 : 31	1	B1 cao
3		24, 60	2	M1 for a first step eg 84 ÷ (2 + 5) (=12) oe or for three other ratios which are multiples of 2:5 eg 4:10, 6:15, 8:20 etc. or for any other count up method A1 for the numbers 24 and 60, in any order.
4		$\frac{3}{20}$	2	M1 for $\frac{60\text{p}}{£4}$ or $\frac{60}{400}$ or $\frac{0.6}{4}$ or equivalent fraction (eg partially cancelled) A1 for $\frac{3}{20}$ cao

<table>
<tr><th colspan="5">PAPER: ANM20_2B</th></tr>
<tr><th>Question</th><th>Working</th><th>Answer</th><th>Mark</th><th>Notes</th></tr>
<tr><td>5 (a)</td><td></td><td>188.46</td><td>2</td><td>M1 for correct alignment of digits ready for calculation with two operations performed correctly eg 208+34.26 (=242.26) or 13.8+40 (=53.8) or 34.26−13.8 (=20.46) or 208+34.26−13.8 (=228.46) shown
NB operations can occur at any stage of a partitioned calculation; professional decision as to whether those operations are appropriate.

A1 cao</td></tr>
<tr><td>(b)</td><td></td><td>437.52</td><td>2</td><td>M1 for evidence of correctly set up method, which may be by traditional methods, by a bones method or using grids, or partitioning; or correct multiplication seen eg carry 7 from 9×8

5469
8 ×
43752

<table>
<tr><td></td><td>5</td><td>4</td><td>6</td><td>9</td><td>×</td></tr>
<tr><td></td><td>4 / 0</td><td>3 / 2</td><td>4 / 8</td><td>7 / 2</td><td>8</td></tr>
<tr><td>4</td><td>3</td><td>7</td><td>5</td><td>2</td><td></td></tr>
</table>

<table>
<tr><td>×</td><td>5000</td><td>400</td><td>60</td><td>9</td></tr>
<tr><td>8</td><td>40000</td><td>3200</td><td>480</td><td>72</td></tr>
<tr><td>or</td><td>400</td><td>32</td><td>4.8</td><td>.72</td></tr>
</table>

A1 cao</td></tr>
</table>

PAPER: ANM20_2B				
Question	**Working**	**Answer**	**Mark**	**Notes**
6		336	3	M1 for 20% of 280 eg 280 × 0.20 or 28 +28 (=56) or any other equivalent partitioning method M1 for increasing 280 by 20% eg 280 + "56" or 280 × 1.2 oe or for 224 A1 cao
7 (a)		$\frac{5}{8}$	2	M1 for use of a common denominator with at least one correct numerator eg $\frac{7}{8}-\frac{2}{8}$ or $\frac{28}{32}-\frac{8}{32}$ oe A1 oe eg $\frac{5}{8}$, $\frac{20}{32}$
(b)		$\frac{15}{28}$	1	B1 for $\frac{15}{28}$ or any other equivalent fraction
8	$\frac{8\times30}{0.8}=\frac{240}{0.8}$ or $\frac{1\times30}{0.1}$ $\frac{8\times31}{0.8}=\frac{248}{0.8}$ or $\frac{1\times31}{0.1}$ $\frac{8\times32}{0.8}=\frac{256}{0.8}$ or $\frac{1\times32}{0.1}$	300 to 320	3	M1 for rounding at least two figures to 8, 30, 31, 32 or 0.8 (which could be evidenced through partial calculation) M1 for rounding and one operation eg sight of 240, 248, 256, 10, 37.5, 0.1 A1 for answer in the range 300 to 320 from use of 3 rounded numbers
9		450	3	M1 for 540 ÷ 6 (=90) or 540 × 5 (=2700) M1 for 540 ÷ 6 × 5 oe or 540 – (540 ÷ 6) oe A1 cao

PAPER: ANM20_2B				
Question	**Working**	**Answer**	**Mark**	**Notes**
10		55	2	M1 for $\frac{385}{700}$ (=0.55) oe A1 cao
11		$\frac{1}{5}$ of 75	3	M1 for 75 ÷5 (=15) or for 84 ÷ 6 (=14) oe A1 for 15 and 14 A1 ft (dep on M1 and on two figures shown) for conclusion eg "1/5 of 75"
12		$3\frac{1}{5}$	3	M1 for writing both fractions as improper fractions eg $\frac{4}{3}\times\frac{12}{5}$, $\frac{20}{15}\times\frac{36}{15}$ M1 for multiplying eg $\frac{48}{15}, \frac{720}{225}$ oe or $3\frac{3}{15}$ oe or 3.2 A1 cao

Pearson Education Limited. Registered company number 872828
with its registered office at 80 Strand, London, WC2R 0RL, United Kingdom