

# Mark Scheme (Results)

Summer 2014

Pearson Edexcel Level 2 Award  
in Number and Measure (ANM20)  
Paper 2A + 2B

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## Contents

1.) Marking Principles	-----	1
2.) Mark Scheme – Level 2 Section A	-----	3
3.) Mark Scheme – Level 2 Section B	-----	7



## 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If working is crossed out and still legible, then it should be given any appropriate marks, as long as it has not been replaced by alternative work.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 canceling 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 Use of ranges for answers**

If an answer is within a range this is inclusive, unless otherwise stated

**Guidance on the use of codes within this mark scheme**

M1 – method mark

A1 – accuracy mark

B1 – Working mark

QWC – quality of written communication

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

## Section A

PAPER: ANM20_2A					
Question		Working	Answer	Mark	Notes
1	(a)		1.4	1	B1 cao
	(b)		2.3	1	B1 cao
2	(a)		9.88	1	B1 cao
	(b)		16.67	2	B1 16.66 or 16.66(recurring) oe B1 for 16.67
3	(a)		+4	1	B1 for 4 or +4
	(b)		1	1	B1 for 1 or +1
4			6	2	M1 for $12 \div 2$ oe A1 cao
5			150	2	M1 for $2500 \times 0.06$ or $2500 \times \frac{6}{100}$ oe A1 cao
6	(a)		12.25	1	B1 cao
	(b)		2.6	1	B1 cao
	(c)		108	2	M1 for sight of 27 or 4 eg $27 \times 4$ A1 cao

PAPER: ANM20_2A				
Question	Working	Answer	Mark	Notes
7		60	3	M1 for $500 \times 0.04$ oe or $500 \times 0.03$ oe or 20 or 15 M1 for $\frac{500 \times 4 \times 3}{100}$ oe or 560 A1 cao
8		300	2	M1 for $360 \div 1.2(0)$ A1 cao
9		18	2	M1 for $4 \times 4.5$ A1 cao
10		374	2	M1 for $10 \times 5.5 \times 6.8$ oe A1 cao
11		232.25	4	M1 for $9.5(0) \times 25$ or $237.5(0)$ M1 for $5 \times 1.5 (=7.5)$ or $9.5(0) \times 1.5 (=14.25)$ M1 for subtraction of $61.7(0)$ and $14.8(0)$ or $76.5(0)$ A1 cao
12		46	3	M1 for division of shape into rectangles or large rectangle – small rectangle M1 for complete method eg $10 \times 2 + 13 \times 2 = 20 + 26$ A1 cao



PAPER: ANM20_2A				
Question	Working	Answer	Mark	Notes
13		3.71(42857..) or $\frac{26}{7}$ or $3\frac{5}{7}$	2	M1 for conversion to vulgar fractions or to decimals eg $\frac{13}{2}$ and $\frac{7}{4}$ or $\frac{13}{2}$ and $\frac{4}{7}$ or 6.5 and 1.75  A1 for $\frac{26}{7}$ or $3\frac{5}{7}$ or 3.71(42857..) oe
14		60 cm <sup>3</sup>	4	B1 for cm <sup>3</sup> M1 for 0.5×4×3 or 6 seen or 4×3×10 only (=120) M1 for “6”×10 A1 cao
15		20.5-20.6	3	M1 for 2×π×4÷2 oe or 2×π×4 oe [=25 – 25.2] A1 for 12.5-12.6 A1 for 20.5-20.6 or ft “12.5-12.6”+8
16		12.5	3	M1 for 160-140 or sight of 20 M1 for $\frac{20}{160} \times 100$ A1 cao
17		240	3	M1 for either multiples of 15: 15,30,45,60,75,90,105 [up to at least 90] or multiples of 80: 80, 160, 240, 320, 400 [up to at least 240] OR one set of prime numbers eg 3,5 or 2,2,2,2,5 M1 for both sets of multiples OR for both sets of primes: 3,5 and 2,2,2,2,5 A1 cao

PAPER: ANM20_2A					
Question		Working	Answer	Mark	Notes
18			51.7-51.8	4	M1 for $10 \times 8 (=80)$ or $\pi \times 3 \times 3 [=28.2-28.3]$ A1 for 28.2-28.3 M1 for "80"-"28.2" A1 51.7-51.8

## Section B

PAPER: ANM20_2B				
Question	Working	Answer	Mark	Notes
1		-5,-3,-2,-1,1,3,5	1	B1 cao
2	(a)	7.369	2	M1 for correct operations with digits of the same place value (could be awarded for lining up digits and attempting to add & subtract) A1 cao
	(b)	114.56	2	M1 for attempted multiplication of digits by 8 or sight of digits 11456 A1 cao
3		$\frac{1}{5}$ of 60 largest	2	M1 for $30 \div 3 (=10)$ or $60 \div 5 (=12)$ oe A1 for 10 and 12 and statement identifying the largest
4	(a)	$\frac{5}{8}$	2	M1 for changing one fraction to a common denominator with matching numerator A1 oe
	(b)	$\frac{3}{20}$	1	B1 oe
5		$\frac{2}{25}$	2	M1 for $\frac{40}{500}$ oe A1 for $\frac{2}{25}$
6		3 : 4	2	M1 for 12:16 oe or for 4 : 3 A1 cao

PAPER: ANM20_2B				
Question	Working	Answer	Mark	Notes
7		£1.35	3	M1 for $1.2(0) \div 8$ or $0.15$ or $1.2(0) \times 9$ or $10.8$ oe M1 for $1.2(0) \div 8 \times 9$ oe or "0.15" $\times 9$ or "10.8" $\div 8$ or 1.35 A1 cao Accept 135p
8		400	3	M1 for $500 \times 0.2$ oe or $500 \div 5$ or 100 M1 for $500 - "100"$ oe A1 cao OR M2 for $500 \times 0.8$ oe A1 cao
9		20	2	M1 for $\frac{30}{150} \times 100$ A1 cao
10		1200	3	M1 for sight of 20, 30 or 0.5 or 300 M1 for one operation with two rounded figures eg sight of 40, 60, 600; could be part of a calculation. A1 cao
11		32 , 48	2	M1 for $80 \div 5 (=16)$ or $80 \times 2$ or $80 \times 3$ or 48 , 32 A1 cao

PAPER: ANM20_2B					
Question		Working	Answer	Mark	Notes
12			$4\frac{7}{12}$	3	<p>M1 for use of common denominator with at least one correct matching numerator eg <math>\frac{4}{12}</math> or <math>\frac{3}{12}</math> or <math>\frac{40}{12}</math> or <math>\frac{15}{12}</math> oe</p> <p>M1 common denominators with both matching numerators, and addition eg <math>\frac{4}{12} + \frac{3}{12}</math> or <math>\frac{40}{12} + \frac{15}{12}</math> oe</p> <p>A1 for <math>4\frac{7}{12}</math> or <math>\frac{55}{12}</math> oe</p>





