#  <br> <br> EXAM PAPERS PRACTICE 

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## GCSE AQA Math 8300

Measures \& Accuracy

## Mark Scheme

## "We will help you to achieve A Star "

M1.
800 or 1600 or 200 or 60 or 120 or 100

800 or 1600
and
200
and
60 or 120 or 100

1920 or 1900 or 2000
SC1 1900 without working or 1900 from 1899

M2.
(a) $2.17158 \ldots$
(b) 2.2
ft their answer to (a)

M3.(a) Subtracting two amounts with one correct

$$
83-57.7
$$

or
83 and 57.7 chosen
$57.7+25.3=83$
25.3

Condone 25300000
(b) $0.21 \times$ their 126200
oe
Condone any attempt to incorporate the million
Digits 26502 imply M1

26502
Condone 26502000000
SC1 99698

## Additional Guidance

Allow the method for $21 \%$ of any value from table (or misread)
Possible answers are 17.43, 14.07, 12.117, 11256,11739
Must be using correct value for full marks
Mark the whole method so further working will not score (except for those who misread and work out $21 \%$ off - see SC1)
(c) $36600000000 \div 29300000$
or
36600 (million) $\div 29.3$ (million)
Digits 1249... or 125... imply M1
1249. ...

May be implied by 1250

1250
ft any answer correctly rounded to the nearest 10

M4.Attempt to count squares
or any area calculation e.g. $4 \times 7$
Evidence of counting areas e.g. dots or numbers in shaded squares
[22, 27]
A1 for [19, 22) or (27, 30]

M5.
1950 or 2049 or 1500 or 2499

1500 and 2049
or
1950 and 2499
Must be seen as a linked pair

549
SC2 550

M6.
32
B1 4 or 16 or 0.5

M7.
5
B1 for 25 or $5^{2}$ seen
or any value in range (5, 5.92]

M8.
(a) $80-74$ or 6 seen
or $\frac{74}{80}(\times 100)$ or 0.925 or 92.5
$\begin{array}{ll}\frac{\text { their } 6}{80} & \\ & \\ & \times 100) \text { or } 0.075 \\ \text { or } 100-\text { their } 92.5 \\ \text { or } 1-0.925 \\ 0.075 \text { implies both method marks }\end{array}$
7.5

SC1 for 8.1(...)
(b) 11.5 kg

Circled or indicated

M9
7500 - 1875 or 5625
their $5625 \div 36$
156.25
$\mathbf{M 1 0 . 2 . 8 5} \times 0.72 \times 0.9$
oe
$285 \times 72 \times 90$
1.8(468)

1846800
$\mathrm{m}^{3}$
$c^{3}$

## Additional Guidance

Accept any rounding to 2 sf or more without working seen, eg 1.85 or 185000

M11.(a) 20(p)
Accept $£ 0.20$ (p)
(b) $10 \times(25-$ their 20$)$
or $10 \times 25-10 \times$ their 20 oe
ft their 20 from (a) if < 25

50(p)
Accept $£ 0.50$ (p)

M12.(a) $2 \times 2(.00)+1.25$ oe
5.25
(b) 10 - their 5.25
4.75
ft their 5.25

## M13.

285 or $284 . \dot{9}$ or 275
or 12.5 or 13.5 or $13.4 \dot{9}$
or 18.5 or $18.4 \dot{9}$ or 17.5
their 285 as part of trapezium equation
or $\left(\frac{\text { their } 12.5+\text { their } 17.5}{2}\right) h$
oe
their $285=(280,290]$
their $12.5=[12.5,13)$
their $17.5=[17.5,18)$
$285=\left(\frac{12.5+17.5}{2}\right) h$
oe
fully correct

19 with no incorrect bounds used

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M14.(a) 2520 \div126 or 20 or
    126\div2520 or 0.05
    oe
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$44 \times$ their 20 or $44 \div$ their 0.05 or
$4960 \div$ their 20 or $4960 \times$ their 0.05
or 880 or 248
oe
M2 $44 \div 126 \times 2520$ or
$4960 \div 2520 \times 126$

| 2520 | 880 | 1560 | 4960 |
| :--- | :--- | :--- | :--- |
| 126 | 44 | 78 | 248 |

(b) (minimum) 3785
(maximum) 3794
SC1 correct answers interchanged

M15.39.5 or 24.5 or 40.5 or 25.5
or 965 or 975

One correctly evaluated trial using at least one bound or one correctly evaluated trial giving an answer in range 965 to 975

$$
\begin{aligned}
& \text { eg } 39.5 \times 24.5=967(.75) \\
& \text { or } 39.7 \times 24.5=972(.65) \\
& \text { or } 40.5 \times 25.5=1032(.75) \\
& \text { Trial values must be in range of bounds }
\end{aligned}
$$

Ticks cannot tell and 965 seen
and
One correctly evaluated trial giving an answer in range 965 to 970
or
Ticks cannot tell and 975 seen
and
One correctly evaluated trial giving an answer in range 970 to 975

$$
\begin{aligned}
& \text { eg } 967.75 \\
& \text { eg } 972.6
\end{aligned}
$$

## Alternative method 1

One correctly evaluated trial giving an answer below 970
(or their value [965, 975])

One correctly evaluated trial giving an answer below 970 (or their value [965, 975])
and
One correctly evaluated trial giving an answer above 970 (or their value [965, 975])

Ticks cannot tell
and
One correctly evaluated trial giving an answer below 970
(or their value [965, 975])
and
One correctly evaluated trial giving an answer above 970
(or their value [965, 975])
eg 967.75 and 1032.75
or 967.75 and 1000
or 967.75

## Additional Guidance

Trial values must be within range of bounds, e.g.
$39.5 \times 26=1027$ scores B1M0
$25 \times 40=1000$ on its own scores zero but see Alt method 2

