

1 Write down an example of each of the following.

(a) An even number.

(a) [1]

(b) A multiple of 7.

(b) [1]

(c) A cube number between 20 and 220.

(c) [1]

(d) A prime number less than 10.

(d) [1]

2 Here is a list of five numbers.

10 12 4 3 6

(a) Write down the median.

(a) [1]

(b) A sixth number is added to the list.
The range of the six numbers is 15.

Work out a possible value for the sixth number.

(b) [2]

16 A sports team scored 400 points.

The defenders scored $\frac{1}{10}$ of the points.

The midfielders and the forwards scored the remainder of the points in the ratio 1 : 5.

Find the percentage of the 400 points that were scored by the forwards.

You must show your working.

Preview from Notesale.co.uk
Page 12 of 50

..... % [5]

- 26 Solve the simultaneous equations.

$$4x - y = 24$$

$$2x + 3y = 26$$

$$x = \dots\dots\dots$$

$$y = \dots\dots\dots [3]$$

- 27 Write the following in order of size, smallest first.

$$0.2 \quad 2^{-2} \quad 2 \times 10^{-2}$$

Show how you decide.

.....,, [3]
smallest

END OF QUESTION PAPER

MARKING INSTRUCTIONS

1. Make sure that you have accessed and completed the relevant training packages for on -screen marking: *RM Assessor Online Training*; *OCR Essential Guide to Marking*.
2. Make sure that you have read and understood the mark scheme and the question paper for this unit. These are available in RM A ssessor.
3. Log-in to RM Assessor then mark and annotate the **required number** of practice responses (“scripts”) and the **required number** of standardisation responses.

MARKING

1. Mark strictly to the mark scheme.
2. Marks awarded must relate directly to the marking criteria.
3. The schedule of dates is very important. It is essential that you meet the RM Assessor 50% and 100% deadlines. If you experience problems, you must contact your Team Leader (Supervisor) without delay.
4. If you are in any doubt about applying the mark scheme, consult your Team Leader via the RM Assessor messaging system.
5. Where a candidate has crossed out a response and provided a clear alternative then the crossed out response is not marked. Where no alternative response has been provided, examiners should give candidates the benefit of the doubt and mark the crossed out response where legible.
6. When a candidate provides contradictory responses, then no mark should be awarded, even if one of the answers is correct.
7. On each blank page the annotation **BP** must be inserted to confirm that the page has been checked. For additional objects (if present), a tick must be inserted on each page to confirm that it has been checked.
8. Award No Response (NR) if:
 - there is nothing written in the answer spaceAward Zero ‘0’ if:
 - anything is written in the answer space and is not worthy of credit (this includes text and symbols).Team Leaders must confirm the correct use of the NR button with their markers before live marking commences and should check this when reviewing scripts.

Note: Award 0 marks for an attempt that earns no credit (including copying out the question).

9. The RM Assessor **comments box** is used by the Principal Examiner or your Team Leader to explain the marking of the practice responses. Please refer to these comments when checking your practice responses. **Do not use the comments box for any other reason.**

If you have any questions or comments for your Team Leader, use the RM Assessor messaging system.

10. Assistant Examiners should send a brief report on the performance of candidate to their Team Leader (Supervisor) by the end of the marking period. Please follow the direction of your Team Leader about which questions you should report on and how to submit your report. Your report should contain notes on particular strengths displayed as well as common errors or weaknesses.
11. Annotations available in RM Assessor. These must be used whenever appropriate during your marking.

Annotation	Meaning
	Correct
	Incorrect
	Benefit of doubt
	Follow through
	Ignore subsequent working (after correct answer obtained), provided method has been completed
	Method mark awarded 0
	Method mark awarded 1
	Method mark awarded 2
	Accuracy mark awarded 1
	Independent mark awarded 1

Subject-Specific Marking Instructions

12. **M** marks are for using a correct method and are not lost for purely numerical errors.
A marks are for an accurate answer and depend on preceding **M** (method) marks. Therefore **M0 A1** cannot be awarded.
B marks are independent of **M** (method) marks and are for a correct final answer, a partially correct answer, or a correct intermediate stage.
SC marks are for special cases that are worthy of some credit.
13. The following abbreviations are commonly found in GCSE mathematics mark schemes.
- **figs 237**, for example, means any answer with only these digits. You should ignore leading or trailing zeros and any decimal point e.g. 237000, 2.37, 2.370, 0.00237 would be acceptable but 23070 or 2374 would not.
 - **isw** means ignore subsequent working after correct answer obtained and applies as a default.
 - **not from wrong working** means not from wrong working.
 - **or** means or equivalent.
 - **rot** means rounded or truncated.
 - **soi** means seen or implied.
 - **dep** means that the marks are **dependent** on the marks indicated. You must check that the candidate has met all the criteria specified for the mark to be awarded.
 - **with correct working** means that full marks **must not** be awarded without some working. The required minimum amount of working will be defined in the guidance column and **SC** marks given for unsupported answers.
14. Anything in the mark scheme which is in square brackets [...] is not required for the mark to be earned, but if present it must be correct.
15. Unless the command word requires that working is shown and the working required is stated in the mark scheme, then if the correct answer is clearly given and is not from wrong working **full marks** should be awarded.
- Do not award the marks if the answer was obtained from an incorrect method, i.e. incorrect working is seen and the correct answer clearly follows from it.
16. Where follow through (**FT**) is indicated in the mark scheme, marks can be awarded where the candidate's work follows correctly from a previous answer whether or not it was correct. For questions with FT available you must ensure that you refer back to the relevant previous answer. You may find it easier to mark these questions candidate by candidate rather than question by question.

Figures or expressions that are being followed through are sometimes encompassed by single quotation marks after the word *their* for clarity, e.g. $180 \times (\text{their '37' + 16})$, or $\text{FT } 300 - (\text{their '52 + 72'})$. Answers to part questions which are being followed through are indicated by e.g. $\text{FT } 3 \times \text{their (a)}$.

17. In questions **with no final answer line**, make no deductions for wrong work after an acceptable answer (i.e. **isw**) unless the mark scheme says otherwise, indicated by the instruction 'mark final answer'.
18. In questions **with a final answer line and incorrect answer given**:
- (i) If the correct answer is seen in the body of working and the answer given on the answer line is a clear transcription error or allow full marks unless the mark scheme says 'mark final answer'. Place the annotation ✓ next to the correct answer.
 - (ii) If the correct answer is seen in the body of working but the answer line is blank, allow full marks. Place the annotation ✓ next to the correct answer.
 - (iii) If the correct answer is seen in the body of working but a completely different answer is seen on the answer line, then accuracy marks for the answer are lost. Method marks could still be awarded if there is no other method leading to the incorrect answer. Use the **M0**, **M1**, **M2** annotations as appropriate and place the annotation next to the wrong answer.
19. In questions **with a final answer line**:
- (i) If one answer is provided on the answer line, mark the method that leads to that answer. A correct step, value or statement that is not part of the method that leads to the given answer should be awarded **M0** and/or **B0**.
 - (ii) If more than one answer is provided on the answer line and there is a single method provided, award method marks only.
 - (iii) If more than one answer is provided on the answer line and there is more than one method provided, award marks for the poorer response unless the candidate has clearly indicated which method is to be marked.
20. In questions with **no final answer line**:
- (i) If a single response is provided, mark as usual.
 - (ii) If more than one response is provided, award marks for the poorer response unless the candidate has clearly indicated which response is to be marked.

Question			Answer	Marks	Part marks and guidance	
19			46.34	3	B2 for 46.33[7...] or B1 for 99 493[.836...] or 144 266[.0625] If 0 scored SC1 or their answer to more than 4 figures correctly rounded to 4 s.f.	for B1 accept these numbers rot to at least integers
20				M1 M1 A1	A1 dep on M1 M1	Allow equivalents for both M1s but it must be full and correct working and allow any correct method e.g. M1 for $\frac{745.6}{11} \times 4.8 = 57.6$ M1 for $57.6 \div 9 = 6.4 = \text{height}$ A1 for 6.4 Condone 24 for $9 + 15$ and 9 for $\frac{1}{10} \times 18$ e.g. $\frac{18}{10}$
21	(a)	(i)	$(360 - 52) \div (1 + 2 + 4)$ or better [= 44]	2	M1 for $360 - 52$ or 308 or <i>their</i> $(360 - 52) \div (1 + 2 + 4)$ Alternative method 1 : M2 for $7x = 360 - 52$ or $7x = 308$ then $x = 44$ or M1 for x, $2x$ and $4x$ or $360 - 52$ or 308 Alternative method 2 : M2 for $52 + 44 + 2 \times 44 + 4 \times 44 = 360$ oe or M1 for $52 + 44 + 2 \times 44 + 4 \times 44$ oe	better includes $308 \div 7$ Mark the work in the answer space and if blank, mark any work round the diagram Allow any letter For M2 and M1 accept 88 for 2×44 and 176 for 88×2