Principal examiner reports for teachers

Principal examiner reports for teachers summarise what candidates did well and what candidates needed to improve for this examination series only.

This report is to be used in conjunction with the question paper and mark scheme.

For guidance on teaching and learning we provide resources for many of our syllabuses.

Resource	Where to find it
Grade descriptions – Grade descriptions describe the level of performance typically demonstrated by candidates achieving the different grades awarded for a qualification.	School support hub Select: Subject > Resource finder > Syllabus and specimen materials
Schemes of work – Schemes of work are designed to support you in your teaching and lesson planning.	School support hub Select: Subject > Resource finder > Teaching and learning
Lesson planning – Guidance on how to plan a lesson.	Lesson planning
Resource plus – There may be additional resources such as teaching packs containing lesson plans, resources and worksheets and videos for aspects of your syllabus.	School support hub Select: Subject > Resource finder > Teaching and learning
Teaching tools	Teaching Tools
Exemplar candidate responses	School support hub Select: Subject > Resource finder > Teaching and learning
Learner guide – A guide for students to help them understand what the course involves.	School support hub Select: Subject > Resource finder > Teaching and learning
Community forums – Do you have a question or something to share? Our online forums are great way to keep up to date with your subject and the global Cambridge community.	Community forum on the school support hub
Access to scripts for this series.	Access to scripts service
Results analysis is available for some syllabuses.	Results analysis
Test maker is available for some subjects.	Test maker

Other services from Cambridge International Education

- **Digital mocks service**
- **Insight assessments**
- **Professional development**
  - Focus on assessment
  - Online marking workshops

© 2026

CAMBRIDGE INTERNATIONAL MATHEMATICS

Paper 0607/12
Non-calculator (Core)

Key messages

What candidates did well
- Candidates showed knowledge of many aspects of the syllabus.
- Candidates attempted to answer nearly all the questions.

What candidates needed to improve
- Candidates need to show more workings.
- Candidates need to check their answers for sense and accuracy.

Comments on specific questions

Question 1

Comprehensive responses
- Nearly all candidates could write down the square number from the list.
- All candidates could write down the multiple of 8.
- Nearly all candidates could write down the cube number and the prime number.

Limited responses
- A few candidates gave 25 or 26 as the cube number in the list.
- Some candidates gave non-prime numbers such as 26 or 27.
- Sometimes candidates gave the prime number and another number.

Question 2

Comprehensive responses
- Many were correct with both their answers by linking the pattern in the *x*-values with the pattern in the f(x)-values.
- Some candidates showed clear workings that showed they had understood that $f(x) = 4x + 1$.

Limited responses
- Some saw a pattern of '+ 4' in the first three values in the range so gave 13 + 4 = 17 when x = 7. This pattern is only correct when the *x*-values increase by 1 each time.
- Generally, candidates showed few workings.
- A few candidates left one of the answer lines blank.

Question 3

(a) **Comprehensive responses**
- Virtually all candidates gave the correct coordinates of point *S* showing they knew that the *x*-coordinate is written first and then the *y*.

Limited responses
- A very small number reversed the coordinates.

© 2026

(b) **Comprehensive responses**

- Many gave the correct point, understanding that the correct point has x-coordinate of –4.

Limited responses

- Many gave point T which came from using the y-coordinate of P rather than the x-coordinate.

(c) **Comprehensive responses**

- Some gave reflection as the single transformation.
- Many gave the correct mirror line.

Limited responses

- A few named this transformation as a rotation.
- Some gave two answers for the mirror line with one being correct and the other incorrect, for example, x-axis and $x = 0$ or $y = 0$ and y-axis.

Question 4

Comprehensive responses

- Virtually all candidates were correct with part **(a)**, by substituting $x = 8$, working out $2 \times 8 - 13$ to give the correct answer.
- In part **(b)**, many candidates substituted for y correctly and went on to solve the equation.

Limited responses

- In part **(b)**, some candidates did not use the correct signs when rearranging the equation.
- Again, in part **(b)**, others did not do the final step to give the value of x.

Question 5

(a) **Comprehensive responses**

- A very large majority of candidates used the order of operations, BIDMAS, to correctly work out the answer.

Limited responses

- Some candidates worked from left to right instead of using BIDMS, so gave an answer of 22 (from 11×2).

(b) **Comprehensive responses**

- A very high number of candidates gave the correct square root.

Limited responses

- Some gave their answer as 9×9 instead of taking the square root of 81,

(c) **Comprehensive responses**

- Many candidates were successful at working with the negative sign.
- Many were successful at multiplying by a decimal less than one.
- A few candidates chose to give their answer as a correct fraction as the question did not ask for a particular form for the answer.

Limited responses

- Some candidates did not include the negative sign in their answer when working with negative numbers.
- Some candidates did not multiply correctly by a decimal less than one, giving answers such as –16 or –0.16

(d) **Comprehensive responses**

- Many were able to convert the mixed numbers into improper fractions and go on to the correct answer.

© 2026

Limited responses

- Some converted the mixed fractions correctly and then used an incorrect method to do the subtraction, for example, subtracting the numerators and the denominators without using a common denominator so, $\frac{11}{5} - \frac{5}{3}$ became $\frac{6}{2}$ or 3.
- Others cancelled the 5s in $\frac{11}{5} - \frac{5}{3}$ and gave $\frac{11}{3}$ as their answer.
- Some candidates made numerical slips in an otherwise correct method.

Question 6

(a) **Comprehensive responses**

- Many gave the correct mathematical name for the shaded shape showing they understood the symbols for the parallel lines.

Limited responses

- Some gave other quadrilateral names such as rhombus, trapezium or kite.

(b) **Comprehensive responses**

- Many showed good knowledge of corresponding angles or alternate angles and the sum of the angles in a triangle.
- The number of candidates who were successful here, was slightly less than with the previous part.

Limited responses

- Many candidates did not indicate the relevant angles on the diagram when working towards finding the value of x.
- Some showed incorrect methods such as the use of Pythagoras' Theorem.

Question 7

(a) **Comprehensive responses**

- Very many candidates combined like terms to give the correct answer.
- Others were successful with one out of the two terms.

Limited responses

- A few candidates tried to multiply as if this expression was in two brackets.
- Some got to the correct simplified expression and then went on to incorrectly combine the unlike terms.
- Some treated the expression as if the second minus sign affected effected every number to its right instead of just the $2m$.
- Some made numerical slips when combining terms.

(b) **Comprehensive responses**

- Many simplified the algebraic fraction correctly.

Limited responses

- Some gave incorrect answers such as $2k^2$, $2k$ or k.
- Some candidates seemed unsure of what was left in the denominator when the ks were cancelled.

Question 8

(a) **Comprehensive responses**

- Few candidates were correct at picking the right diagrams for both equations.
- Candidates were more successful with picking out the diagram to match the second expression.

© 2026

Limited responses

- Diagram B (which could be, for example, $x = 3$) was most frequently chosen instead of A for $y = 2x$.
- Diagram C, which has a positive gradient was by far the most common wrong answer for $y = 2 - x$, a line with negative gradient.

(b) **Comprehensive responses**

- Some candidates gave an acceptable reason of, either, an equation for the given line, or what the line $x = 5$ should be.
- Others correctly said that the given line is horizontal when $x = 5$ would be vertical.

Limited responses

- Some gave incorrect equations for the given line such as $y = x$.
- Some incorrectly said the given line is on the y-axis when it goes through the y-axis.
- Many candidates found it problematic to give an acceptable reason.

Question 9

(a) **Comprehensive responses**

- Many gave the correct correlation, negative.

Limited responses

- Some used words to describe the correlation, for example, decreasing or strong.
- Others gave no correlation or positive as their answer.
- A very small number of candidates did not attempt this question.

(b) **Comprehensive responses**

- A good number plotted the mean point and drew a line of negative gradient through it.
- Many of these lines were also in tolerance.

Limited responses

- Some did not follow the instruction in the question to plot the mean point.
- Many drew a line of positive gradient starting at the origin.
- Some drew curves or joined the points up with straight lines.

(c) **Comprehensive responses**

- Many understood that they needed to find 5 on the vertical axis to read over to their line and then down rather than go up from 5 on the horizontal axis which is a more commonly asked question.
- Many used their line of best fit, with a negative gradient, correctly to estimate the value of t.

Limited responses

- If candidates had a line with positive gradient, their value could not be followed through.
- Some candidates gave answers that were much higher than 20, the largest value for t.

Question 10

Comprehensive responses

- A high number were fully correct here with well-presented working.
- Many candidates knew how to apply a scale factor to find a length and then go on to work out the perimeter of a shape.

Limited responses

- Some found the scale factor of the sides of the rectangles and went on to find the height of rectangle A.
- After finding the height of A, a few found the semi-perimeter or the area of the small rectangle instead of the perimeter.
- Some did not use the information that the rectangles were mathematically similar to find the scale factor.
- A few found the scale factor of the sides of the rectangles and then used unsuitable methods to find the side length, occasionally for example, Pythagoras' Theorem.

© 2026

Question 11

Comprehensive responses
- Few candidates gave the correct distance travelled. These candidates showed they understood which formula to use and could convert hours and minutes to decimal hours.

Limited responses
- Many did not use the correct decimal time for 1 hour 20 min giving, for example 1.2 or 1.3 hours.
- Many incorrectly multiplied the distance in km by a time in minutes rather than in hours.

Question 12

Comprehensive responses
- Many gave the correct length of the radius by setting up an implicit equation and then solving for the radius.

Limited responses
- Some set up the implicit equation correctly and then made method errors finding the radius.
- Some worked with a decimal value for π which is unnecessary as π cancels on both sides of the equation.
- Some used 48 or 48π as the radius in the formula to find the curved surface area.

Question 13

(a) **Comprehensive responses**
- A few candidates gave the correct bearing by standing at *Q*, looking north and turning clockwise to face *R*, remembering to give the answer as a three-figure bearing.

Limited responses
- Many candidates gave 90 instead of a three-figure bearing.
- Others used the angle of 35°, given in the question, as a basis for their answer.

(b) **Comprehensive responses**
- A few candidates knew that the bearing was found from standing at *R*, looking north then turning clockwise to face *Q*.
- A small number showed the relevant angle on a diagram and then used the correct angle values to work this bearing out.

Limited responses
- Candidates did not show the angle on the diagram which would have helped them visualise the situation in order to set up the calculation.
- Common wrong methods seen included 90 + 35 = 125 or 180 – 35 = 145.

Question 14

(a) **Comprehensive responses**
- Very many candidates were able to give the elements in the intersection of sets *A* and *B* showing they understood the set notation used.

Limited responses
- A very small number gave one correct and one incorrect element in the intersection.
- A very small number gave the elements of *A* and *B* that were not in the intersection.

(b) **Comprehensive responses**
- Only a few candidates gave the correct number of elements in the union of sets *A* and *B*. Again, this question was about understanding set notation.

© 2026

Limited responses

- Many gave 10, by counting all the elements, without taking account that 5 and 11 appear twice. This showed that they did understand that the notation required the number of elements not just listing the elements.
- Some did not recognise that the notation meant the number of elements so listed all the elements in $A \cup B$.
- As with the last part, a very small number listed elements, this time the list was often of the elements of A and B that were not in the intersection.
- A very small number of candidates did not attempt this question.

Question 15

Comprehensive responses

- Many gave correct answers showing they knew the form of numbers in standard form for both parts of the question.

Limited responses

- A few gave the numbers with more than one digit in front of the decimal point, for example, 671×10^6 or 33×10^{-2}.
- For the first part, a small number rounded the given number to two significant figures, 6.7×10^8 rather than three.
- In particular in the second part, some candidates gave the wrong number for the exponent, for example, –3 or 3.

Question 16

Comprehensive responses

- A slight majority of candidates gave the correct answer showing they understood what the highest common factor of two numbers means and how to find it.

Limited responses

- Some found both the common prime factors and then progressed no further.
- A few found one of the common factors.
- A few showed partial tables or factor trees.

Question 17

Comprehensive responses

- A majority of candidates were able to round each of the four numbers correctly.
- Many then went on to find an estimate of the calculation using the rounded values.

Limited responses

- Some did not round any of the numbers and proceeded to work out the actual answer by long multiplication, subtraction and division.
- A few rounded some of the four vales correctly.

Question 18

(a) **Comprehensive responses**

- Nearly all gave the correct mathematical name for the line *COB*.

Limited responses

- A few gave other words that were circle vocabulary, for example, radius or centre.

(b) **Comprehensive responses**

- Only a very small number of candidates filled in the two parts to the statement correctly showing good understanding of circle theorems.
- Many candidates gave the correct value for angle *CAB*.

© 2026

Limited responses
- A few gave the incorrect angle for *CAB.*
- Many gave the total of degrees in a triangle.

Question 19

(a) **Comprehensive responses**
- The majority of candidates understood the probability of an event not occurring and completed the tree diagram correctly, with the probabilities on each pair of branches adding to one.
- Many knew the probability of a customer buying a cup of tea is the same for each customer.

Limited responses
- Many candidates were able to give the probability of a customer not buying a cup of tea at least once on the tree diagram showing they understood the probability of an event not occurring.
- Some understood that the probabilities on a pair of branches add to 1.

(b) **Comprehensive responses**
- A small number of candidates correctly picked out the relevant probabilities and then multiplied them to arrive at the correct answer.

Limited responses
- Some picked out the correct probabilities from their tree diagrams.
- A few set up the correct calculation and then went on the make arithmetic slips.
- Many incorrectly used addition to combine the probabilities showing they did not understand that, in this situation, the probabilities should be multiplied.

Question 20

Comprehensive responses
- A reasonable majority were able to solve the simultaneous equations following a correct algebraic method without making any arithmetic slips.
- A few made minor errors in the algebraic method.

Limited responses
- Some candidates made algebraic errors in the manipulation of the equations. Often, this was to choose to add the equations when they should be subtracted to eliminate one of the variables.
- When multiplying one of equations by a constant, some made arithmetic slips or only multiplied two out of the three terms.
- Occasionally, a candidate gave two values that satisfied one of the equations.

© 2026

CAMBRIDGE INTERNATIONAL MATHEMATICS

Paper 0607/22
Non-calculator (Extended)

Key messages

- This paper of the new specification requires, on some questions, detailed responses as well as some short 'traditional' Paper 2 questions.
- Candidates must show all of their working. Candidates who showed a correct method, even if their final answer was incorrect, demonstrated understanding of the required process. Candidates are encouraged to show their working to illustrate their approach.
- Candidates should check their working in each question to ensure that they have not made any careless numerical slips.
- When a question requires candidates to show a given result, comprehensive responses include all relevant steps and clear working to demonstrate understanding.

General comments

- Candidates were well prepared for the paper and were able to demonstrate good understanding and knowledge across many of the topics tested.
- The standard of written work was good with many candidates clearly showing the methods they were using.
- Candidates did not seem to have a problem with the time allowed to complete the paper.
- Some candidates made erros through incorrect simplification of a correct expression.
-

Comments on specific questions

Question 1

(a) **Comprehensive responses**
- Nearly all candidates were able to calculate the missing value correctly.

Limited responses
- A small number of candidates made arithmetic slips in their calculation.

(b) **Comprehensive responses**
- This part was very well answered. Candidates found the difference between the highest and lowest number.

Limited responses
- Some candidates identified the largest and smallest frequencies and subtracted those numbers.

(c) **Comprehensive responses**
- This part was well answered, candidates knew that the mode was linked to the largest frequency.

Limited responses
- A small number of candidates gave the frequency rather than the number of letters.

© 2026

(d) **Comprehensive responses**

- The majority of candidates were able to identify correctly the middle number of the 90 houses.

Limited responses

- The common incorrect answer was 3, which was found from finding the middle of the numbers from 0 to 6.

(e) **Comprehensive responses**

- Many of the candidates were able to find this probability, by adding together their two frequencies. This showed a good understanding of 'more than'.
- Some candidates that carried forward an earlier error in part **(a)** and continued with the correct process by adding 3 to their answer and then dividing by 90. This approach demonstrated understanding of the required method, even if the initial value was incorrect.

Limited responses

- A small number of candidates gave their answer as 3/90.

Question 2

Comprehensive responses

- Nearly all candidates were able to answer this BODMAS question correctly.

Limited responses

- A small number of candidates gave their final answer as –2.

Question 3

Comprehensive responses

- This question was well answered.

Limited responses

- Some candidates included more than one pair of brackets in their answers. Where the statement remained correct, this did not affect the validity of their response.

Question 4

Comprehensive responses

- The majority of candidates found the correct vector.

Limited responses

- A number of candidates found the vector $\overrightarrow{BA}$.

Question 5

Comprehensive responses

- Many candidates gave a correct answer here, usually by converting 6 kg into grams before cancelling. Candidates should be aware that ratios do not strictly include units.

Limited responses

- A small number of candidates converted kg into grams by multiplying by 100.

Question 6

Comprehensive responses

- Most candidates used the information to find 1/5 of the total and then multiplying this answer by 5.

Limited responses

- Some candidates worked out 3/5 of the total and gave this as their final answe

© 2026

Question 7

(a) Comprehensive responses
- The responses this year on relative frequencies was much improved than the previous sessions.
- Some cancelled their fractions or converted their fractions to a decimal.

Limited responses
- Some candidates confused the information with cumulative frequency and give incorrect answers of 60, 110, 156, 200.

(b) Comprehensive responses
- Almost every candidate gave the correct answer.

Question 8

Comprehensive responses
- Candidates were instructed to write down and solve an inequality to represent the problem.
- Candidates who followed the instructions generally produced complete and accurate responses.

Limited responses
- A significant number of candidates gave an equation, rather than an inequality, correctly found the value of 4, and then gave an answer of 4 hours.

Question 9

(a) Comprehensive responses
- Nearly all candidates were able to solve this 2 step equation and showed their working clearly.

Limited responses
- There were occasional slips in the signs of their terms after they collated like terms.

(b) Comprehensive responses
- There were two approaches to answering this question and both methods proved to be equally successful.
- Candidates could multiply out the brackets, rearrange, then factorise or square root the original equation and subtract 1.

Limited responses
- Some candidates who used the first method were unable to factorise their correct expression.
- Using the second method candidates needed to have two values when finding the square root of 9.

Question 10

Comprehensive responses
- Good attempts made by candidates using both methods.
- It is easier to work with the exterior angle of a polygon, 180 – 168 and then divide 360 by 12.

Limited responses
- Some candidates misquoted the formula for the interior angle, omitting n, and then writing $(n – 2)180 = 168$.

Question 11

Comprehensive responses
- Candidates showed a good understanding of circle theorems and usually worked out the required angles correctly.
- For angle *ADC* candidates needed to state that opposite angles in a cyclic quadrilateral add up to 180.
- For angle *ACO* candidates needed to state that angle at centre is twice angle at the circumference and that there were base angles in an isosceles triangle.

© 2026

Limited responses
- Few candidates where able to give geometric reasons for their answers.
- When a question asks for geometrical reasons, calculations only are not sufficient.
- Candidates must use the correct language and be precise.

Question 12

(a) **Comprehensive responses**
- The standard form question was well answered.
- Some candidates changed the numbers into the same power, which is unnecessary when multiplying.

Limited responses
- A small number of candidates gave a correct answer not in standard form.

(b) **Comprehensive responses**
- This part was very well answered by nearly all candidates.

(c) **Comprehensive responses**
- This question required candidates to divide 1.2×10^{29} by Q. There were many correct solutions.

Limited responses
- A significant number of candidates gave their answer as 0.3×10^{8} forgetting to rewrite this answer in standard form.

Question 13

Comprehensive responses
- Candidates displayed very good algebra skills and clearly set out their solutions even if there was a sign error.

Limited responses
- Some candidates did not multiply out both parts of the bracket.

Question 14

(a) **Comprehensive responses**
- The majority of candidates were able to give the correct transformation and its three properties.

Limited responses
- Some candidates realised that the transformation was a rotation by 90, and didn't give the direction of the rotation.

(b) **Comprehensive responses**
- Most candidates where able to demonstrate a clear understanding of transformation with a negative scale factor.

Limited responses
- Candidates were able to enlarge the triangle by a scale factor 2, and either used the wrong centre of enlargement, or did not consider the negative associated with the scale factor.

(c) **Comprehensive responses**
- This part was very well answered with many candidates.

Limited responses
- Candidates realised that the transformation was an enlargement and found the centre correctly by appropriate lines being drawn, and they omitted the negative sign in the scale factor.

© 2026

- A small number of candidates used the word reduction or shrink instead of enlargement.

Question 15

Comprehensive responses
- Most candidates recognised that they needed to multiply throughout by the conjugate of the denominator, which enabled them to make good progress with this question..

Limited responses
- Some candidates were unable to expand $(2\sqrt{3})^2$ correctly
- Some candidates didn't simplify their answer. by dividing all terms by 2, as required in the question.

Question 16

Comprehensive responses
- Candidates demonstrated excellent factorising skills to both the numerator and denominator.
- To complete the question, candidates had to amend one of their signs before cancelling.

Limited responses
- Candidates who factorised the numerator using $2x$ were unable to cancel a factor, and if a factor of $-2x$ was used then cancelling became straightforward.

Question 17

Comprehensive responses

- The majority of candidates recognised the need to use the formula for the area of a triangle as $A = \frac{1}{2}ab\sin\vartheta$ and substitute correct values.

Limited responses

- A significant number of candidates used $\sin 60 = \frac{1}{2}$.
- Some candidates started with a correct equation, and were then unable to rearrange correctly.

Question 18

(a) **Comprehensive responses**
- Nearly all candidates showed a good understanding of functions with most candidates finding g(2) first before substituting their answer into f(x).

(b) **Comprehensive responses**
- This question was a standard inverse function question with most candidates completing the task. Candidates started by inter-changing the variables before rearranging.

Limited responses
- Some candidates correctly rearranged the expression and forgot to swap the variables.

(c) **Comprehensive responses**
- The majority of candidates were able to start the question correctly by expanding the brackets and simplifying.

Limited responses
- Some candidates who expanded the brackets correctly forgot to add on the 1 to their answer.

(d) **Comprehensive responses**
- Candidates who were able to equate $2(px + q) - 3$ with $8x - 1$ and equate coefficients were usually successful.

© 2026

Limited responses

- Many candidates were unable to make any meaningful progress as they didn't substitute the given expression for h(x) into the original expression for f(x).

Question 19

Comprehensive responses

- Although this was a testing question, there were many perfect solutions.
- The majority of candidates were able to use the correct formula to work out the length of each arc.
- Most candidates realised that they needed to add on 6 + 6 to their total arc lengths.

Limited responses

- Many candidates decided to subtract their arc lengths due to being confused with similar problems that required the area of the sector.

Question 20

Comprehensive responses

- This question was very well answered by the majority of candidates, showing an excellent understanding of quadratic factorisation.
- Many candidates tried to split the middle term into two terms that added to give –13 and multiplied to give –30. If they did this correctly and got the correct factors then they were able to reach correct solutions.

Limited responses

- A small number of candidates made a small error in their factorisation, and when expanded gave two terms correct. These candidates were able to continue with the question and reach a correct solution.

© 2026

CAMBRIDGE INTERNATIONAL MATHEMATICS

Paper 0607/32
Calculator (Core)

Key messages

What candidates did well
- Candidates performed well in questions with a familiar content.
- Many candidates set out their working in a clear and logical manner.

What candidates needed to improve
- Candidates need to give answers to the required degree of accuracy.
- Candidates should use the value of pi from their calculator or 3.142.
- When sketching graphs, candidates need to practice copying what is on their screen onto the exam paper.
- Candidates should use a ruler to draw a straight line.
- Any errors should be crossed out leaving the one solution.
- Full working out should be shown.

Comments on specific questions

Question 1

(a) **Comprehensive responses**
- Many candidates showed understanding of the key and could work out the total number of drinks.

Limited responses
- Some candidates appeared not to fully understand the key.
- Some candidates did not total the number of drinks correctly.

(b) **Comprehensive responses**
- Many candidates found the correct difference.

Limited responses
- Some candidates did not fully understand the key and were unable to find the correct difference.

Question 2

(a) **Comprehensive responses**
- Many candidates worked out the correct cost of the five books.

Limited responses
- A few candidates divided by 5 rather than multiplying by 5.
- Candidates should use their calculator to avoid making errors in multiplication.

(b) **Comprehensive responses**
- Candidates realised that the first step was to divide 100 by $6.72 .

© 2026

Limited responses
- Some candidates tried trial and error and then chose the incorrect number.
- Some candidates rounded their answer up rather than down.
- A few candidates omitted this part of the question.

Question 3

Comprehensive responses
- Many candidates worked out the two calculations correctly and inserted the correct sign.

Limited responses
- Some candidates did not carry out the calculations correctly and wrote that the answers were equal.
- A few candidates mixed up the sign for ‘less than’ and ‘greater than’.

Question 4

(a) **Comprehensive responses**
- Many candidates correctly converted the fraction and percentage to decimals and wrote them in the correct order.

Limited responses
- Some candidates put the fraction before the 0.78 .
- A few candidates put the numbers in the reverse order.

(b) **Comprehensive responses**
- Many candidates knew to divide 93 by 150 and multiply by 100.

Limited responses
- Some candidates found 93% of 150.

(c) **Comprehensive responses**
- Most candidates could find the correct percentage answer.

Limited responses
- There were few incorrect answers.

Question 5

Comprehensive responses
- Most candidates solved the equation correctly.

Limited responses
- One error was subtracting 8 from 13 incorrectly.

Question 6

Comprehensive responses
- Some candidates first divided by 5 to find $\frac{1}{26}$ and then multiplied their answer by 26 and correctly converted their answer to hours and minutes.

Limited responses
- The most common wrong answer was to find $\frac{5}{26} \times 25$ and give an answer of 4 hours 8 minutes.
- A few candidates converted the correct answer incorrectly into hours and minutes.
- A few candidates omitted this question.

© 2026

Question 7

(a) **Comprehensive responses**
- Many candidates knew the correct mathematical name for the angle.

Limited responses
- A few candidates wrote obtuse or reflex for their answer.

(b) (i) **Comprehensive responses**
- Some candidates divided 56 by 4 to find $\frac{1}{13}$ of the total amount. Then multiplied by 7 and 2 to find the correct sizes of the other two angles.

Limited responses
- Many candidates incorrectly divided 56 by 13 and then multiply their answer by 7 and 2.
- A few candidates realised that the angle '*c*' would be half of the angle '*a*' and did not know how to find angle '*b*'.
- A few candidates omitted this part.

(ii) **Comprehensive responses**
- Some candidates added up their three angles correctly and found that they did not add up to 180.

Limited responses
- Many candidates just stated that the angles should add up to 180 without checking that their three angles did not add up to 180.

Question 8

(a) **Comprehensive responses**
- Many candidates factorised the expression correctly.

Limited responses
- Some candidates only took out 2 as a common factor.
- Some candidates divided both parts by 4 and wrote $2x + 3$ for their answer.

(b) **Comprehensive responses**
- Many candidates correctly expanded the expression.

Limited responses
- Some candidates multiplied the first term correctly and not the second term.
- Some candidates wrote $15x^2$ instead of $15x^3$.
- Some candidates found the correct answer and then continued incorrectly to try and simplify it.

Question 9

(a) **Comprehensive responses**
- Many candidates used their calculator correctly to find the answer.

Limited responses
- There were few incorrect answers.

(b) **Comprehensive responses**
- Most candidates knew that a number to the power 0 is 1.

Limited responses
- There were few incorrect answers.

(c) **Comprehensive responses**
- Many candidates used their calculator correctly to find the answer.

© 2026

Limited responses
- Some candidates wrote the answer as 3^8 or 3^6 without working out the calculation.
- Some candidates wrote 729 for their answer.

(d) **Comprehensive responses**
- Many candidates could use their calculator correctly.

Limited responses
- Some candidates incorrectly wrote 1.74 – 12.
- Some candidates multiplied the two numbers instead of subtracting them.
- Some subtracted 7.6 from 2.5 and then subtracted the powers of 10.

Question 10

(a) **Comprehensive responses**
- Some candidates worked out the radius to more than three significant figures and used this answer to correctly find the area.

Limited responses
- Some candidates worked out the radius to only two significant figures and this affected the accuracy of their answer for the area.
- Some candidates mistook the circumference for the diameter and halved this value for their radius.
- Some candidates correctly found the radius and then forgot to find the area.
- Some candidates used their calculator incorrectly to find the radius by dividing 58 by 2 then multiplying by pi.

Question 11

Comprehensive responses
- Many candidates correctly rearranged the equation to make x the subject.

Limited responses
- Some candidates divided partially by 9 or 16.
- Some candidates found the correct answer and then tried to simplify it.
- Some candidates rearranged the equation incorrectly.

Question 12

(a) **Comprehensive responses**
- Some candidates set out their working clearly. They knew to divide by 6 to find the area of one face of the square. Then they proceeded correctly to show how to find the given volume.

Limited responses
- Some candidates tried to use the answer and work backwards.
- Some candidates divided by 8 instead of 6.
- Some candidates used the answer from part **(b)**.
- Some candidates tried to find the cube root of 512 or 384.

(b) **Comprehensive responses**
- Many candidates set out the correct equation to find the height.

Limited responses
- A few candidates used a wrong formula.
- A few candidates omitted this part.

Question 13

(a) **Comprehensive responses**
- Most candidates knew how to find the reduction and worked out the new price correctly.

© 2026

Limited responses
- Some candidates found the reduction and then forgot to subtract it from 175.
- A few candidates subtracted 0.12 from 175.
- A few candidates divided 175 by 12.

Question 14

(a) **Comprehensive responses**
- Most candidates worked out the mean correctly.

Limited responses
- A few candidates found the median rather than the mean.
- A few candidates added the numbers up incorrectly.

(b) **Comprehensive responses**
- Most candidates found the correct range.

Limited responses
- A few candidates did not notice that the numbers were not in order and subtracted 43.9 from 44.8 .

(c) **Comprehensive responses**
- Many candidates compared the mean times and the ranges correctly.

Limited responses
- A few candidates only gave one comparison.
- A few candidates gave incorrect comparisons.
- A few candidates gave incomplete comparisons.
- A few candidates just repeated the times and did not compare them.

Question 15

(a) **Comprehensive responses**
- Most candidates drew the correct line of symmetry.

Limited responses
- There were few incorrect answers.

(b) (i) **Comprehensive responses**
- Some candidates found the correct order of rotational symmetry.

Limited responses
- Some candidates omitted this part.
- The most common incorrect answer was 1.

(ii) **Comprehensive responses**
- A few candidates set out their work well and correctly found the base length.

Limited responses
- Some candidates found the correct value for the area of the ten squares.
- Some candidates only found the area of one square.
- Some candidates subtracted 9 from 231.
- Some candidates found the area of one triangle as $0.5 \times x \times 9.4$ and then forgot to multiply their answer by five.

Question 16

(a) **Comprehensive responses**
- Many candidates found the perimeter.

© 2026

Limited responses
- Some candidates found the length of the hypotenuse only.
- Some candidates truncated their answer for the hypotenuse resulting in an inaccurate final answer.
- A few candidates just added 5 and 8.5 .
- A few candidates multiplied 5 by 8.5 .
- A few candidates used the area of a triangle formula.

(b) **Comprehensive responses**
- Many candidates used the information given to find the correct value of the angle.

Limited responses
- Some candidates used their truncated answer for the hypotenuse with sine or cosine resulting in a less accurate answer.
- Some candidates divided 5 by 8.5 before using the inverse tangent.
- Some candidates used an incorrect trigonometric ratio.
- A few candidates incorrectly wrote $180 - 2x + 90$ and found an answer of 45°.

Question 17

(a) **Comprehensive responses**
- A few candidates sketched the graph completely accurately.

Limited responses
- Many candidates drew two branches in the correct quadrants.
- Many candidates did not copy the graph from their calculator accurately and missed the vertical asymptote.
- Some candidates only drew one branch.
- Some candidates sketched the wrong graph.
- A few candidates omitted this part.

(b) **Comprehensive responses**
- Most candidates who sketched the graph correctly found the correct intersection point.

Limited responses
- A few candidates omitted this part.
- Some incorrect answers were (0, 0), (0, 2) and (0, 6).

(c) **Comprehensive responses**
- Most candidates sketched the correct line.

Limited responses
- A few candidates did not use a ruler to draw their line.

(d) **Comprehensive responses**
- Many candidates found the correct points of intersection.

Limited responses
- A few candidates omitted this part.
- A few candidates tried to work out the answer algebraically.
- Some candidates gave incorrect coordinates.

© 2026

CAMBRIDGE INTERNATIONAL MATHEMATICS

Paper 0607/42
Calculator (Extended)

Key messages

What candidates did well
- Candidates did particularly well on the first 7 questions on the paper.
- Many candidates demonstrated strong algebraic skills.
- Many candidates demonstrated strong use of GDC for curve sketching.

What candidates needed to improve
- Candidates need to interpret sketch graphs in the use of solving equations and inequalities rather than trying to solve them algebraically.
- Candidates need to recognise when combining probabilities that non replacement necessitates an adjustment of the second probability.
- In order to obtain a final answer to the required degree of accuracy, intermediate answers need to be kept to greater accuracy.

Comments on specific questions

Question 1

(a) **Comprehensive responses**
- Most candidates shaded the correct square.

Limited responses
- There were very few incorrect responses and no common errors.

(b) **Comprehensive responses**
- Most candidates shaded the correct square.

Limited responses
- There were very few incorrect responses and no common errors.

Question 2

Comprehensive responses
- Most candidates collected the terms the terms correctly.

Limited responses
- There were very few incorrect answers.

Question 3

Comprehensive responses
- Most candidates gave the correct answer.

Limited responses
- The most common error was when candidates made a sign error when collecting terms leading to an answer of 1.

© 2026

Question 4

(a) **Comprehensive responses**
- Most candidates gave the correct answer after dividing 75 by 20 and then multiplying by 48.

Limited responses
- There were insufficient incorrect responses to pick out common errors

(b) **Comprehensive responses**
- Most candidates showed a correct method and then rounded their answer down to give the final answer.

Limited responses
- This part was less well done with the most common error was to divide 100 by 35 and not multiplying that by 20.

Question 5

(a) **Comprehensive responses**
- Most candidates gave the correct answer.

Limited responses
- A small number of candidates made an arithmetic error in one of the terms.

(b) (i) **Comprehensive responses**
- All candidates gave the correct answer.

Limited responses
- There were very no incorrect answers.

(ii) **Comprehensive responses**
- Most candidates gave the correct answer.

Limited responses
- The most common error was when candidates used $d = 3$ instead of $d = -3$ in the formula $a + (n - 1)d$.

Question 6

(a) **Comprehensive responses**
- Most candidates gave the correct answer.

Limited responses
- A small number of candidates, having found the time of 1.6 hours, converted this to 1 hour 6 minutes.

(b) **Comprehensive responses**
- Most candidates correctly found the time for the second part of the journey and then used this to find the overall average speed from total distance ÷ total time.

Limited responses
- Some candidates found the average of the 2 speeds and gave an answer of 62.5 km / h.
- Others made arithmetic mistakes, for example in adding the times together.

Question 7

(a) **Comprehensive responses**
- Most candidates drew a good cumulative frequency curve passing through all the given points.

Limited responses
- Some candidates drew a curve which did not pass through all the points.
- A very small number of candidates plotted the points at the centre of each class interval.

© 2026

(b) **Comprehensive responses**

- Most candidates read off the value from their graph correctly and subtracted from 120 to give the answer.

Limited responses

- A number of candidates omitted the subtraction from 120.
- A number of candidates misread the scale and read off at for example 215 or 240.

Question 8

Comprehensive responses

- Most candidates shaded both regions correctly.

Limited responses

- There was a number of incorrect responses with no common errors evident.
- Of those who only shaded one of the regions correctly, responses were evenly distributed between regions.

Question 9

Comprehensive responses

- There was a large number of correct answers, with many candidates going directly to the division of 31.07 by 0.65.

Limited responses

- Some candidates divided 31.07 by 0.35.
- A significant number of candidates found 35% of 31.07 and added it on to 31.07.

Question 10

(a) **Comprehensive responses**

- There were many very good sketches.
- Candidates who drew both asymptotes parallel to the y-axis first ensured that the branches of the graph did not overlap.
- Almost all candidates showed the central branch passing through the origin.

Limited responses

- In some sketches one of the outer branches had an overlap with the central branch.
- In others, the gap between the inner and one or both of the outer branches was excessively large.

(b) **Comprehensive responses**

- Many candidates gave all 3 asymptotes.

Limited responses

- The asymptote $y = 0$ was often omitted or given incorrectly as $x = 0$.
- Some candidates wrote down the relevant numbers without equating them to the associated variable.

(c) **Comprehensive responses**

- Many candidates gave both pairs of inequalities with correct inequality signs and numbers rounded correctly.

Limited responses

- Many candidates, having correctly identified the x-coordinates of the points of intersection of the function with the line $f(x) = 3$, did not match these values with the appropriate asymptote. For example, $x < -3.63$ was often seen instead of the correct answer $-4 < x < -3.63$.
- When writing down their inequalities candidates must use correct signs, particularly when an asymptote is involved. The answer $-4 < x \leq -3.63$ is incorrect as x cannot equal the value at the asymptote.

© 2026

- Many candidates tried to use an algebraic approach rather than use their sketch to solve the inequality. This was almost always unsuccessful.

Question 11

Comprehensive responses
- Full working was given by many candidates for each of the four components of the total surface area of the shape. These consisted of the curved surface area of the cylinder, the area of the base, the area of the top of the cylinder with the smaller circle removed and the curved surface area of the cone.
- For the last of these Pythagoras was used to find the slant height of the cone accurately.
- Those candidates who kept their accurate answers to all four surfaces were then able to achieve the required accuracy in the final answer.

Limited responses
- Many candidates used a formula for the total surface area of the cylinder, not dealing correctly with the area of the top surface of the cylinder.
- A common error was to subtract the total surface area of the cone from the total surface area of the cylinder.
- Some candidates used the vertical height of the cone instead of its slant height when finding the curved surface area of the cone.

Question 12

(a) **Comprehensive responses**
- Most candidates correctly subtracted the *x* and *y* coordinates, added the squares of the two differences and then took the square root to find the correct answer.

Limited responses
- The subtraction of the coordinates sometimes had an arithmetical error for example 1 – (–5) was sometimes given as 4.
- Some candidates added the coordinates instead of subtracting.
- Some candidates subtracted the squares instead of adding.

(b) **Comprehensive responses**
- It was important that candidates worked out the equation of the line perpendicular to the line *AB* at point *A* and not the equation of the perpendicular bisector of *AB*.
- Candidates recognised that the equation of a straight line should have exact coefficients.

Limited responses
- Working out the equation of the perpendicular bisector of *AB* was a very common error.
- The calculation of the gradient of *AB* sometimes had arithmetical errors.
- Having worked out the gradient of *AC*, some candidates then did not use the coordinates of point *A* (-5,8) in order to find the correct equation. The mid-point (–2, 3.5) was often seen.
- Some candidates rounded decimal values of *m* and *c*.

Question 13

Comprehensive responses
- Most candidates followed the instruction to 'Show all you working' and showed their method, either by equalising coefficients of *x* or *y* and adding or subtracting equations appropriately, or by the elimination of one variable by substitution.

Limited responses
- The most common error was an arithmetical one. This was true for both methods.
- A small number of candidates added the left-hand side of the equation to eliminate a variable, and then subtracted the right-hand side, or vice versa.

© 2026

Question 14

(a) **Comprehensive responses**

- Most candidates used the cosine rule correctly, showed full working and gave a correct answer.

Limited responses

- A small number of candidates made an error in their calculation after writing down a correct expression.
- Some candidates assumed that angle *BAC* was 50°.

(b) **Comprehensive responses**

- Most candidates used the sine rule correctly with their answer from the previous part and then added this angle to 40° to give the correct answer.

Limited responses

- The most common error was to omit the addition of 40°.
- Some premature approximation was seen which led to a final answer outside the acceptable range.

Question 15

(a) **Comprehensive responses**

- Many candidates chose to add 3 probabilities together (for tiles SS, S and not S, and not S) and S).
- A few candidates chose to use the method 1 – P (no S tiles).

Limited responses

- Some candidates omitted the probability of 2 S tiles being chosen.
- Some candidates used probabilities with replacement.

(b) **Comprehensive responses**

- Candidates identified the required probabilities, multiplied them together, and finally multiplied by 6, the number of different ways in which the tiles could be chosen.
- Just a few candidates worked out the probabilities of the 6 different orders separately and added those together.

Limited responses

- Many candidates identified the 3 probabilities and multiplied them correctly and then needed to consider the number of different ways in which the tiles could be chosen. This step was omitted. Others multiplied incorrectly by 3 instead of 6.
- Some candidates used probabilities with replacement.
- Most of the candidates who tried to work out the probabilities of the different orders separately, omitted one or more of the orders.

Question 16

(a) **Comprehensive responses**

- Candidates correctly identified that the required length could be calculated by using Pythagoras theorem twice and did so without any intermediate rounding, giving the answer to an acceptable degree of accuracy.
- A few candidates knew the three-dimensional version of Pythagoras using $BE^2 = 12^2 + 8^2 + 5^2$.

Limited responses

- Some candidates rounded an intermediate value leading to a final answer outside the acceptable range.
- Some candidates, who correctly found the length of one of the sides required did not continue to find *BE*.

© 2026

(b) **Comprehensive responses**

- Many candidates correctly identified the required angle *DBE* and then used trigonometry to calculate it, using the length of *BE* from the previous part.

Limited responses

- Many candidates did not identify the required angle and gave working for another angle, usually *EBA*.

Question 17

Comprehensive responses

- There were many correct responses with candidates choosing to expand one pair of brackets and then multiply the result by the third bracket, with all working written down clearly.

Limited responses

- Some candidates, although using a correct method, made an error in their first expansion. This was usually a sign error.
- Some candidates tried a different method, multiplying terms from the 3 brackets in pairs. Almost inevitably, terms were omitted leading to an incorrect answer.

© 2026

CAMBRIDGE INTERNATIONAL MATHEMATICS

Paper 0607/52
Investigation (Core)

Key messages

What candidates did well
- Continuing a number sequence was done well.
- Writing a relationship in algebraic terms showed good understanding.

What candidates needed to improve
- Candidates need to understand that a general algebraic result cannot be shown by one particular numerical example.
- Candidates are advised that, if they use the calculator, they should enter what they typed in, as this shows good communication.
- Candidates are advised not make conclusions about the lengths of lines or the size of angles from a diagram labelled 'NOT TO SCALE'.
- Candidates should ensure that any square root signs cover enough characters.

Comments on specific questions

Question 1

(a) **Comprehensive responses**
- Most candidates correctly measured the lengths of the sides of the triangle.

(b) **Comprehensive responses**
- Nearly all candidates correctly squared the numbers from **part (a)**.

(c) **Comprehensive responses**
- Most candidates were able to add and subtract the numbers from **part (b)** to get 40.

Question 2

(a) **Comprehensive responses**
- Most candidates correctly measured the lengths of the sides of the triangle.

(b) **Comprehensive responses**
- Nearly all candidates correctly squared the numbers from **part (a)**.

(c) **Comprehensive responses**
- Most candidates were able to add and subtract the numbers from **part (b)** to get 120.

Question 3

Comprehensive responses
- Most candidates filled in the correct numbers in the table. Occasionally there was a numerical error.

© 2026

Question 4

(a) **Comprehensive responses**

- The majority of candidates gave a particular numerical example to show $a^2 + b^2 - c^2 = ab$. Candidates need to understand that a general algebraic result cannot be shown from one particular example.

(b) **Comprehensive responses**

- Most candidates correctly substituted the given values for a and b into the given relationship.

Limited responses

- A few candidates did not show the substitution and went directly to the rest of the calculation. Candidates are advised that, if they use the calculator here, they should enter what they typed in, as this shows good communication.

(c) **Comprehensive responses**

- A minority of candidates showed that the result was true for a particular size of equilateral triangle rather than showing the general result was true.

Limited responses

- Many candidates used triangles that did not have three equal sides.

Question 5

(a) **Comprehensive responses**

- Many started with the equation $9^2 + 65^2 - 9 \times 65 = 61^2$, which led to the conclusion that 3721 = 3721. Whilst this reasoning did not follow the expected logical approach, responses of this type were accepted for this question. Some candidates gave $9^2 + 65^2 - 9 \times 65 = 3721$ and $61^2 = 3721$ as separate statements.
- Another response, seen many times, was to show the calculation for c, confirming that it was 61.
- Several candidates used the relationship seen in the table in **Question 3(b)** and evaluated $9^2 + 65^2 - 61^2$ and 9×65, each giving 585, which shows that (9, 65, 61) is an Eisenstein triple.

Limited responses

- A few candidates did not communicate the calculator entries they used to calculate 3721 or 585. It was important that the initial substitutions were clearly shown.

(b) (i) **Limited responses**

- Nearly all candidates started by assuming that triangle *PSR* was equilateral, and gave no reason for this based on the given information. Candidates should not make conclusions about the lengths of lines or the size of angles from a diagram labelled 'NOT TO SCALE'.

(ii) **Comprehensive responses**

- As well as giving the correct triple, the responses included communication as to how 56 was found through the subtraction 65 – 9.

Limited responses

- Several of these responses showed attempts at using trigonometry on triangles which were not right-angled.
- Many candidates wrote down the triple that had been given, instead of finding the related one. Sometimes this was because they assumed that *Q* was the midpoint of *PS*.

(c) **Comprehensive responses**

- Several candidates spotted the relationship between the triples and wrote down the correct answer.

© 2026

Question 6

(a) **Comprehensive responses**

- The large majority of candidates entered the correct numbers into the table and successfully extended the sequence of triples by two more terms. Very few candidates showed, by indicating differences in the table, how it was possible to continue the sequences.

(b) **Comprehensive responses**

- Many candidates gave a correct algebraic statement. Some preferred to write the connection in words and relied on sufficient command of English to avoid any ambiguity.

(c) **Comprehensive responses**

- Most of these candidates wrote $2\sqrt{899+1}$ to communicate how to find a. Some wrote $2\sqrt{899}$ + 1 which was not suitable communication.
- Several were able to go further and show how to find c^2 using $59^2 + 899^2 - 59\times899$ thus showing proper communication.
- A few candidates recalled that subtracting $a = 59$ from $b = 899$ would give another Eisenstein triple.
- A few candidates gave the equilateral triangle of side 899 as giving another Eisenstein triple.

Limited responses

- Bringing together the results from previous questions was not seen.

© 2026

CAMBRIDGE INTERNATIONAL MATHEMATICS

Paper 0607/62
Investigation and Modelling (Extended)

Key messages

What candidates did well
- Many candidates demonstrated expertise in the mathematical skills required and in the interpretation of the context.
- The overall performance was of a very high standard.
- Finding the *n*th term of a sequence was well done by most candidates.

What candidates needed to improve
- Most candidates need to improve their use of letters for angles, lines and triangles in geometrical work.
- The question involving reasoning with angles in a geometric diagram was not completed well.

Comments on specific questions

***Section A* Investigation**

Question 1

Comprehensive responses
- Most candidates either wrote the required statement or included it in their working.

Limited responses
- A few candidates wrote 2cos60° = 1 without showing that cos 60° = 0.5 .
- A few candidates made comments about equal sides or integer lengths using words such as equilateral or Pythagoras.

Question 2

Comprehensive responses
- The majority of candidates wrote the explicit calculation required and reached the correct answer.

Limited responses
- A few candidates wrote 216 instead of the calculation of 9×24.

Question 3

(a) **Comprehensive responses**
- Many candidates found *QS* to be $b - a$.

Limited responses
- Many candidates identified an equilateral triangle without naming the triangle.
- Most of those who stated there was an equilateral triangle did so without showing the correct or complete working to find angle *PSR*.
- Of the few candidates who stated an isosceles triangle, most did so using the information given of *PS* = *PR* rather than using the angles *PSR* and *PRS.*

© 2026

(b) **Comprehensive responses**

- Most candidates wrote down the correct answers following a correct expression for *QS* in **Question 3(a)**.

Limited responses

- A few responses could be improved for straightforward subtraction that did not warrant the use of a calculator.

(c) **Comprehensive responses**

- Many candidates showed sufficient working to communicate how they calculated *b* to be 77.
- The explicit calculations such as 77^2 and 32×77 were usually written down.

Limited responses

- Some candidates missed communication steps, such as 2464 instead of 32×77.
- A few candidates used *b* as 77 without identifying how they had found this value.
- Some candidates did not recognise that for the Eisenstein triples to be related both triples had to have the same *b* values and the same *c* values.

Question 4

(a) **Comprehensive responses**

- Most candidates completed the table correctly.
- The most common communication was to write down a calculation such as $7^2 + 15^2 - 7 \times 15$.

Limited responses

- A few candidates needed to set out each step clearly when completing the *c* column.
- Some candidates omitted to show any communication.

(b) **Comprehensive responses**

- Most candidates found all three correct answers.
- There were many good examples of communication.

Limited responses

- Some candidates assumed the expressions were quadratic without verifying this by showing at least three second differences of 2.
- The communication was sometimes not sufficient with two not three second differences of 2 shown in the *b* or *c* columns.

(c) **Comprehensive responses**

- Many responses clearly set up expressions for *b* and *c* subtracted to equal 35.
- The omission of the brackets around the expression for *c* led to a non-integer value for *n*.
- Many candidates completed the Einstein triples correctly.

Limited responses

- Some candidates omitted to show the subtraction of the expressions for *b* and *c* equal to 35.
- Of those who noticed that $b - c = n - 1$, few showed this in the table using the numbers given.

***Section B* Modelling**

Question 5

(a) **Comprehensive responses**

- Most candidates showed the calculation and wrote the correct answer.

Limited responses

- In a few cases the calculation was not shown.

(b) **Comprehensive responses**

- Most candidates gave the correct answer.
- A few answers of $600x$ or $\frac{x}{600}$ were seen.

© 2026

- The question did not ask for a simplified expression so answers such as $\frac{144000}{240x}$ were acceptable.

Limited responses
- The most common out of the few incorrect answers was $240x$, giving the cost of buying x chairs.

(c) **Comprehensive responses**
- Most candidates showed the correct working using their answer to **Question 5(b)**.
- The question did not ask for a simplified expression so answers such as $\frac{4\,608\,000}{240x}$ were acceptable.

Limited responses
- A few candidates omitted or crossed out their calculation.

(d) (i) **Comprehensive responses**
- Most candidates answered this correctly.
- A fairly common answer was $\frac{0+x}{2}$ which could have been easily simplified to $\frac{x}{2}$.

Limited responses
- A few candidates wrote x as the denominator as well as in the numerator.

(ii) **Comprehensive responses**
- Many candidates showed the correct method for calculating the $12x$.
- Some of these candidates also identified the terms correctly with buying, ordering and storage.

Limited responses
- Many candidates did not show the link between the kinds of costs and the associated terms.
- A few candidates called the buying costs 'costs'.
- A few candidates showed the storage costs to be calculated as $\frac{24}{2} \times x$ rather than $24 \times \frac{x}{2}$.

Question 6

(a) **Comprehensive responses**
- Many candidates drew very good sketches.
- Some graphs stopped short of $x = 150$.
- Some candidates did not accurately identify or plot the minimum point on their graphs. Greater attention to the scale and the plotted data would help ensure the minimum point is correctly positioned.

Limited responses
- Very few graphs touched the T axis.
- Incorrect typing of the function probably led to some completely incorrect graphs.

(b) (i) **Comprehensive responses**
- Most candidates answered this correctly.

Limited responses
- Occasionally the minimum total cost was given as the answer instead of the number of chairs for this minimum cost.

(ii) **Comprehensive responses**
- Many candidates answered this question well.
- Some candidates thought that they needed to use the function for the total cost rather than dividing 600 by their economic order quantity.

© 2026

Limited responses

- Some candidates confused the number of orders with the number of chairs in an order.

(c) **Comprehensive responses**

- Some candidates substituted 40 into the model to find the minimum amount instead of reading the minimum T value from the graph on their calculator.
- Some candidates choose to substitute 50 into the model which indicated that they were thinking it was 50 chairs instead of the 50 orders that was given in the question.
- Some candidates rounded the minimum to \$145 000 and subsequently lost 3-figure accuracy.

Limited responses

- Some candidates found the number of chairs and did not get any further.
- Some candidates found a minimum value that was more than the cost of the 50 orders.

Question 7

(a) **Comprehensive responses**

- Most candidates correctly substituted into the given model and most of these equated the model to 40.
- Some algebraic errors were seen in solving the equation in k.

Limited responses

- Some errors resulted in a non-integer value for k.

(b) **Comprehensive responses**

- Many candidates rounded 37.94… chairs to 38 and others used the exact value of $12\sqrt{10}$.
- Some candidates lost accuracy through rounding 37.94… to 37 which was incorrect in the context of the question.
- A few candidates assumed that the cost of one chair also had to be reduced by 10%.
- Many candidates omitted to say that the 5% was a percentage decrease, (this could have been shown by an answer of –5%).

Limited responses

- A few candidates did not show their working for the calculation of 90% of 600.
- Some candidates only found the correct number of chairs.

© 2026