This test is divided into non-calculator and calculator questions.

The following marks are awarded for each question.

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| B | Unconditional accuracy mark |
| M | Method mark – the correct method must be shown but there may be an arithmetic error; the sight of the value given in brackets implies the award of the method mark |
| A | Accuracy mark – unless the question specifies that working **must** be shown, then the sight of the correct answer implies the award of full marks (unless the answer clearly comes from incorrect working) |
| C | Communication mark |
| P | Process mark – to show correct process for problem solving. Any other process of a similar standard to achieve an accurate result is acceptable to achieve this mark |
| FT | Incorrect values may be **followed through** from one step to the next, **provided** that the correct method is seen in each step and the only errors are arithmetic. This is shown in mark schemes by putting a number in inverted commas |
| OE | Or Equivalent answer mark |

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| Non-Calculator | | | |
| Q | Answer | Mark | Comment |
| **1a** | 12 060 | B1 |  |
| **1b** | 2000 | B1 | Accept 1000’s-(not 1000) |
| **2a** | –5 –3 0 7 11 | B1 |  |
| **2b** | 0.34 0.5 75% | B2 | B1 smallest and largest identified. |
| **3a** | 202 | B1 |  |
| **3b** | 6 000 | B1 |  |
| **3c** | 10 | B1 |  |
| **3d** | 560 | M1 | Complete method. Condone one arithmetic error. |
|  |  | A1 | 560 |

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| **4a** | > | B1 | Accept ≠ |
| **4b** | , 0.8 | B1 | Accept tenths |
| **5a** | (£)72 | P1 | 350 – 278 |
|  |  | A1 | coa |
| **5b** | (£)24 | M1 | ft their ‘72’ ÷ 3 |
|  |  | A1 | 24 |
| **6** | 2.5 oe | B1 |  |
| **7a** | 0.99 and 0.01, either order | B1 |  |
| **7b** | either  0.67 and 67  or  6.7 and 670 | B1 |  |
| **8** | e.g. 3 × 2 = 6 | B2 | B1 at least one correct prime or factor identified. |
| **9** | (£)9 | M1 | 10% = £6 found or |
|  |  | A1 | coa |
| **10** |  | B1 |  |
| **11a** | Correct reflection (3,2) (4,2) (3,4) | B1 |  |
| **11b** | Correct coordinate marked (–4,0) | B1 |  |
| **12** | 6*e* + 2*f* | B2 | B1 one correct |
| **13a** | *c* – 2 | B1 |  |
| **13b** | 2*c* | B1 |  |
| **14a** |  | B1 |  |
| **14b** |  | M1 | changed to |
|  |  | M1 | seen  Award method marks if complete correct method with different denominator. |
|  |  | A1 | cao |
| **15** | 1.15(m) | P1 | 3.2 – (ʻ0.7 + 1.35ʼ) |
|  |  | A1 | 1.15 |
| **16** | (£)17.30 | M1 | Complete method. Condone one error.  Do not accept (£)17.3 |
|  |  | A1 |

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| **17** | Either  Odd + odd = even  odd + even = odd  or  odd + odd + odd = odd or answer is odd and 20 is even | R1 |  |
| **18** | 4 | B1 |  |
| **19** | 8 | M1 | 20 ÷ 5 = 4 |
|  |  | A1 | 8 |

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| CalculatorCalculator | | | |
| Q | Answer | Mark | Comment |
| **20** | –4(°) | B1 |  |
| **21** | 12 | B1 |  |
| **22** | 7.55 am | P1 | Full method attempted 9.00 – 65 minutes |
|  |  | A1 |  |
| **23** | (£)1.47 | P1 | 10 – 1.18 attempted (8.82) |
|  |  | P1 | their ‘8.82’ ÷ 6 |
|  |  | A1 | cao |
| **24** | (£)25.98 | P1 | Attempt to partition, one correct area |
|  |  | P1 | 16 stated as total area, or 32 seen. |
|  |  | P1 | Two tins of paint identified. |
|  |  | A1 | 25.98 |
| **25** | 2.5(cm) | M1 | 100 ÷ (5 × 8) |
|  |  | A1 | 2.5 |

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| Question | Description | Step | Marks |
| **1a** | Round positive whole numbers to the nearest 10, 100 or 1000 | 1 | 1 |
| **1b** | Read, write, order and compare numbers up to 10 000 000 and determine the value of each digit. | 2 | 1 |
| **2a** | Order positive and negative integers | 1 | 1 |
| **2b** | Order fractions, decimals and percentages | 4 | 2 |
| **3a** | Apply four operations in correct order to integers and proper fractions | 2 | 1 |
| **3b** | Use appropriate strategies to multiply and divide mentally, including by multiples of 10, 100 and 1000, and solve scaling problems and problems involving rate. | 3 | 1 |
| **3c** | Use knowledge of the order of operations to carry out calculations involving the four operations. | 3 | 1 |
| **3d** | Multiply multi-digit numbers up to 4 digits by a 1- or 2-digit whole number using the formal written method of long multiplication. | 4 | 2 |
| **4a** | Use > or < correctly between two positive decimals (decimals should  be to 4 or 5 significant figures) | 2 | 1 |
| **4b** | Know what each digit represents in numbers with up to 2 decimal places | 2 | 1 |
| **5a** | Use standard column procedures to add and subtract whole numbers | 1 | 2 |
| **5b** | Calculate and interpret the mean as an average. | 3 | 2 |
| **6** | Understand that halving is the reverse of doubling | 2 | 1 |
| **7a** | Choose and use an appropriate method, including counting up, to add  and subtract numbers with up to 2 decimal places, including in the  context of measures and money and finding change, and use  mathematical reasoning to investigate and solve problems. | 2 | 1 |
| **7b** | Multiply and divide decimals by 10, 100, 1000, and explain the effect | 3 | 1 |
| **8** | Understand the difference between factors, multiples and prime numbers | 3 | 2 |
| **9** | Calculate simple percentages | 3 | 2 |
| **10** | Use fraction notation to describe parts of shapes | 3 | 1 |
| **11a** | Reflect shapes in the x or y axes | 4 | 1 |
| **11b** | Use conventions and notation for 2D coordinates in all four quadrants | 3 | 1 |
| **12** | Simplify algebraic expressions by collecting like terms | 4 | 2 |
| **13a** | Create basic expressions from worded examples | 4 | 1 |
| **13b** | Create basic expressions from worded examples | 4 | 1 |
| **14a** | Begin to add and subtract simple fractions and those with simple common denominators | 4 | 1 |
| **14b** | Add and subtract simple fractions with denominators of any size | 5 | 3 |
| **15** | Subtract integers and decimals with up to two decimal places each | 4 | 2 |
| **16** | Subtract integers and decimals with up to two decimal places each | 4 | 2 |
| **17** | Recognise rules relating to odd and even numbers | 5 | 1 |
| **18** | Solve simple one step equations which include fractions | 4 | 1 |
| **19** | Divide a given quantity into two parts in a given part : part or part :  whole ratio | 6 | 2 |
| **20** | Use negative numbers in context, and calculate intervals across zero and give generalisations to describe what happens when adding and subtracting with positive and negative numbers. | 3 | 1 |
| **21** | Find non-unit fractions of amounts. | 4 | 1 |
| **22** | Use units of measurement to estimate and solve problems in everyday contexts involving length, area, volume, mass, time and angle | 3 | 2 |
| **23** | Solve addition and subtraction multi-step problems in contexts, including money, deciding which operations and methods to use and why. | 4 | 3 |
| **24** | Calculate the areas of more complex shapes made from rectangles | 4 | 4 |
| **25** | Calculate the volume of cuboids | 6 | 2 |

Marks to Steps conversion table

The table below converts marks to a step on the Pearson progression scale. For more information on the progression service please see the [progression website](https://www.pearsonschoolsandfecolleges.co.uk/secondary/ProgressionandIntervention/Progression_Services/Progression_Services.aspx).

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| --- | --- |
| Mark boundary | Step |
| 0 | U |
| 1–10 | 1st Step |
| 11–19 | 2nd Step |
| 20–30 | 3rd Step |
| 31–39 | 4th Step |
| 40–46 | 5th Step |
| 47–55 | 6th Step |