|  |  |
| --- | --- |
| **Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Form \_\_\_\_\_\_\_\_**  | **Overall****\_\_\_\_\_\_%** |
| **Section A: Skills and Multiple Choice****Marks\_\_\_\_\_\_\_/30 \_\_\_\_\_\_\_%** | **Section B: Problem Solving****Marks\_\_\_\_\_\_\_/ 14 \_\_\_\_\_\_\_%** |



|  |
| --- |
| **Skills Covered** |
| **Skill** | **Topic** | **Skill** | **Topic** |
| 1 | Percentage Calculations | 7 | Solving Linear Equations |
| 2 | Ratio | 8 | Unknowns on both sides |
| 3 | Fraction Calculations | 9 | Change the subject of a formula |
| 4 | Mean, median mode and range | 10 | Factorising simple expressions |
| 5 | Expanding Single brackets | 11 | Pythagoras Theorem |
| 6 | Simplifying Algebraic Expressions with brackets | 12 | Pythagoras Theorem  |
|  |
| **Section A: Multiple choice** |
| A. Which of these can be written as ? Circle all the possible answers.

|  |  |
| --- | --- |
|  |  |
|  |  |

 |
| 2 marks |
| B. What is the value of tan *A* for this triangle?2 cm3 cm*A**B**C*Not drawn accurately Circle your answer.  |
| 1 mark |
| **Section A: Skills** |
| 1. David is going to buy a cooker.The cooker has a price of £320.David pays a deposit of 15% of the price of the cooker.How much money does David pay as a deposit? | 2. Sean and Rebecca share £45 in the ratio How much more does Rebecca get than Sean? |
| R A G  | 2 marks | R A G  | 3 marks |
| 3. Work out Give your answer as a mixed number. | 4. James records how many emails he gets a day over an 8 day period.4 42 8 9 8 4 8 5Calculate the mean. |
| R A G  | 3 marks | R A G  | 2 marks |
| 5. Expand  | 6. Expand and simplify  |
| R A G  | 2 marks | R A G  | 3 marks |
| 7. Solve  | 8. Solve  |
| R A G  | 2 marks | R A G  | 3 marks |
| 9. Rearrange to make the subject. | 10. Factorise  |
| R A G  | 2 marks | R A G  | 1 mark |
| 11. Work out the length *y*.11 cm18 cm22 cm cm15 cm | 12. Work out the length *x*. |
| R A G  | 2 marks | R A G  | 2 marks |

|  |
| --- |
| **Section B – Problems** |
| 1. A box contains 192 pens,They are red, green or blue. A quarter of the pens are red. The ratio green pens : blue pens = 1 : 8How many blue pens are there?  |
|  | 4 marks |
| 2. 600 people visit a cinema. go to screen 1. 40% go to screen 2. The rest go to screen 3.How many people go to screen 3?  |
|  | 4 marks |

|  |
| --- |
| 3. In a sale all items are reduced by 30%On the final day the **sale prices** are reduced by 20% Work out the **final day** price of a sofa that was priced at £290 before the sale started. |
|  | 3 marks |
| 4. One kilogram of cheese costs £5.60.Jane buys 200 g of cheese.Work out how much Jane pays. |
|  | 3 marks |