YEAR 10 HOMEWORK – 2R

BOOKLET 3

Complete the questions in each box. Make sure that you show all of your workings

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| 1.  zO  D  30O  E  90O  yO  xO  zO  A  B  a) Find x  b) Find y  c) Find z | C  32O |
| 2. You can use this rule to work out the total cost, in pounds, of hiring a carpet cleaner  Multiply the number of days by 7.8 and then add 12  Andy hires a carpet cleaner. The total cost is £97.80  Work out the number of days Andy hires the carpet cleaner for. |  |
| 3. There are 35 pens in a box. 10 of the pens are green. The rest of the pens are red.  (a) What fraction of the pens in the box are red?  (b) Write down the ratio of the number of green pens to the number of red pens. Give your ratio in its simplest form. |  |
| 4. Ross rolled an ordinary dice 30 times. The frequency table gives information about his results   |  |  | | --- | --- | | Score | Frequency | | 1 | 7 | | 2 | 5 | | 3 | 4 | | 4 | 4 | | 5 | 6 | | 6 | 4 |   Find the mean score |  |
| 5. Amelia, Hayden and Sophie did a test. The total for the test was 75 marks.  Amelia got 63% of the 75 marks. Hayden got 7/13 of the 75 marks. Sophie got 40 out of 75  Who got the highest mark? You must show all your working. |  |
| 6. Here are the first five terms of an arithmetic sequence  – 3 2 7 12 17  Find an expression, in terms of n, for the nth term of this sequence. |  |
| 7. The ratio of the number of boys to the number of girls in a school is 3:5.  There are 90 girls in the school.  Work out the total number of students in the school. |  |
| 8. The diagram represents a solid made from seven centimetre cubes.    On the centimetre grid, draw a plan of the solid. |  |
| 9. Make t the subject of the formula  2y = + 3a |  |
| 10. Jim rounds a number, x, to one decimal place. The result is 11.8 Write down the error interval for x. |  |

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