Band 3 – Test 2 Answers

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| 1. | + = + =  2 ÷ 1 = x = = 1 = 1 | 1 mark for a correct common denominator  1 mark for correct answer  1 mark for correct improper fractions  1 mark for correct multiplication of fractions  1 mark for correct answer | 5 |
| 2. | 34 x 17    34 x 17 = 578  3.4 x 1.7 = 5.87 | 1 mark for multiplying correct integers  1 mark for correct multiplication  1 mark for correct location of dp | 3 |
| 3. | 10% = £42.00  5% = £21.00  2½% = £10.50  17½% = £73.50  £420 + £73.50 = £493.50 | 1 mark for calculating 17½%  1 mark for adding 17½% to £420  1 mark for correct answer | 3 |

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| 4. | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | 35% |  | 0.4 |  |  | | | 0.35 | 0.25 | 0.4 | 0.33 | 0.4 | | |  |  |  |  |  | | |  |  | 35% | or 0.4 | | or 0.4 | | | 1 mark for 3 correct equivalent FDPs  1 mark for correct order | 2 |
| 5. | 7 + 3 + 2 = 12  £36 ÷ 12 = £3  7 x £3 = £21 | 1 mark for calculating total number of parts  1 mark for calculating value of 1 part  1 mark for correct answer | 3 |
| 6. | 1.3 x 1.7 = 2.21 22.1 ÷ 1700 = 0.013 | 1 mark for each correct answer | 2 |
| 7. | 1.962631579 1.96 | 2 marks for correct calculation  1 mark for correct rounding | 3 |
| 8. | t8 m5 | 1 mark for each correct answer | 2 |
| 9. | 1/3 | Correct answer | 1 |
| 10. | x² + 3x | Correct answer | 1 |
| 11. | 7r + 2 = 5r – 20  2r + 2 = -20  2r = -22  r = -11 | 1 mark for 2r = -22  1 mark for correct answer | 2 |
| 12. | T = 35h + 50 | 1 mark for 35h  1 marks for + 50 | 2 |
| 13. |  | Correct answer | 1 |
| 14. | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | **x** | -2 | -1 | 0 | 1 | 2 | 3 | | **y** | -5 | -2 | 1 | 4 | 7 | 10 | | 1 mark for at least 2 y values correct  Or 2 marks for all 3 values correct  1 mark for coordinates plotted correctly  1 mark for straight line segment through coordinates | 4 |

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| 15. | 110º  Corresponding angles are equal  35º  Angles on a straight line sum to 180º OR vertically opposite angles are equal OR angles in a triangle sum to 180º | 1 mark for each correct answer  1 mark for each correct reason | 4 |
| 16. |  | 1 mark for each correct angle  1 mark for R correctly located | 3 |
| 17. | (2 x 12) + (½ x 6 x 5) = 24 + 15 = 39 cm² | 1 mark for correct area of triangle  1 mark for correct area of rectangle  1 mark for correct total area | 3 |
| 18. | 200 ÷ (10 x 5) = 200 ÷ 50 = 4 cm | 1 mark for volume ÷ 50  1 mark for correct answer | 2 |
| 19. | 1200 ÷ 4 = 300 km/h | 1 mark for distance ÷ time  1 mark for correct answer | 2 |

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| 20. | |  |  |  | | --- | --- | --- | | **Region** | **Frequency** | **Angle** | | Midlands | 22 | 88º | | London | 36 | 144º | | Southern England | 8 | 32º | | Northern England | 24 | 96º | | **Total** | **90** | **360º** | | 1 mark for x 4 seen  1 mark for correctly calculating angles  1 mark for correctly drawn pie chart with labels | 3 |
| 21. | |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | Coin | Dice | | | | | | | |  | **1** | **2** | **3** | **4** | **5** | **6** | | **1** | 2 | 3 | 4 | 5 | 6 | 7 | | **2** | 3 | 4 | 5 | 6 | 7 | 8 | | **3** | 4 | 5 | 6 | 7 | 8 | 9 | | **4** | 5 | 6 | 7 | 8 | 9 | 10 | | **5** | 6 | 7 | 8 | 9 | 10 | 11 | | **6** | 7 | 8 | 9 | 10 | 11 | 12 |   P(7) = 6/36 | 1 mark for correctly completing sample space diagram  1 mark for identifying 36 possible outcomes  1 mark for 6 7s. | 3 |