Band 4 – Test 3 Answers

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| 1. | 60 – 48 = 12  12 ÷ 48 x 100 = 25% | 1 mark for calculating change value  1 mark for change x 100  original  1 mark for correct answer | 3 |
| 2. | 200 x 1.4 = €280 | 1 mark for multiplying by exchange rate  1 mark for correct answer | 2 |
| 3. | 123.4mm 122.5mm 123.48mm 124mm 123.5mm | Correct answer | 1 |
| 4. | 20 x 4 = 80 = 400  0.2 0.2 | 1 mark for rounding one value to 1 significant figure  1 mark for rounding all values to 1 significant figure  1 mark for correct answer | 3 |
| 5. | m10 | Correct answer | 1 |
| 6. | 3 x 107 0.002 | 1 mark for each correct answer | 2 |
| 7. | 4gh(3g – 4h)  2t² - 12t + 5t – 30  2t² - 7t - 30 | 1 mark for partially factorised  Or 2 marks for fully factorised  1 mark for expanding correctly  1 mark for simplifying correctly | 4 |

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| 8. | 4(2x + 1) = 2(3 – x)  8x + 4 = 6 – 2x  10x + 4 = 6  10x = 2  x = 2 = 1  10 5 | 1 mark for correctly expanding brackets  1 mark for 10x = 2  1 mark for correct answer | 3 |
| 9. | p = 2q + 10  p – 10 = 2q  p – 10 = q  2 | 1 mark for -10 or ÷2  1 mark for correct answer | 2 |
| 10. | 3x + 2 > -7  3x > -9  x > -3 | 1 mark for 2  1 mark for correct inequality symbol used | 2 |
| 11. | Exterior angle = 180 – 156 = 24º  360 ÷ 24 = 15 sides | 1 mark for calculating exterior angle  1 mark for 360 ÷ exterior angle  1 mark for correct answer | 3 |
| 12. | Correct angle bisector with all construction lines present | 1 mark for correct answer  1 mark for construction lines | 2 |
| 13. |  | 1 mark for identifying C of E  1 mark for an enlargement of scale factor 2  1 mark for fully correct enlargement  1 mark for identifying y = 4  1 mark for fully correct reflection | 5 |
| 14. | = 230 km | 1 mark for 1.7² and 3.2²  1 mark for adding and square rooting  1 mark for correctly rounded answer | 3 |

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| 15. | 15 mins | 1 mark for correct answer  1 mark for correct rest line  1 mark for correct line representing the journey home | 3 |
| 16. | (5 x 7) + (3 x 7) + (4 x 7) + 2(½ x 4 x 3)  = 35 + 21 + 28 + 12  = 96 cm² | 1 mark for area of at least 2 faces  1 mark for all areas calculated  1 mark for correct answer rounded correctly | 3 |
| 17. | Describe stratified sampling method  Describe relative frequency method | 1 mark for each correct answer | 2 |
| 18. | Negative correlation  Correct line segment that can be used as a line of best fit  Accept answers between 3 and 4 | 1 mark for each correct answer | 3 |
| 19. | Options overlap OR no timeframe OR not exhaustive  Same age/not varied enough | 2 marks for 2 correct  1 mark for correct answer | 3 |
| 20. |  | 1 mark for correct answer for first bag  1 mark for correct answers for second bag | 2 |