**Year 8 Higher Standard: Assessment 3 Revision Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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|  | **Topic 9: Fractions** | **Mark** |
| 1. | a) Convert 30 % into a fraction ………  b) Convert 0.45 into a fraction ………  c) Convert ¾ into a percentage ………  d) By doing a division convert into a decimal.   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | |  |  |  |  |  |  | | 3 | 7 |  |  |  |  |   e) Put these numbers in order of size smallest first  35% 0.4 0.32  …….. ……… ……… ……… ………  f) What is the reciprocal of ? ……… | (3)  (1)  (1)  (1) |
| 2. | Find of £24  ……………… | (2) |
| 3. | Calculate:  a) b)  …………………….……………………. …………………….…………………….  c) d)  …………………….……………………. …………………….……………………. | (2)  (2) |
| 4. | Isobel receives £60 for her birthday.  She spends 25% on clothes.  She spends on a McDonalds meal.  How much has she got left over?  ……………… | (3) |
|  | Total | (15) |

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|  | **Topic 10: Angles** | **Mark** |
| 1. | Find the missing angles and give reasons for your answers.   |  |  | | --- | --- | | 25°  a | 205°  b | | a = …………………… | b = …………………… | | …………………………………………………………………………  ………………………………………………………………………… | …………………………………………………………………………  …………………………………………………………………………  d  60°  85°  150° | | 100°  c |  | | c = …………………… | d = …………………… | | …………………………………………………………………………  ………………………………………………………………………… | …………………………………………………………………………  ………………………………………………………………………… | | (4)  (4) |
| 2. | Find the missing angles and give reasons for your answers.   |  |  | | --- | --- | | 110°  a | 125°  b  c | | a = …………………… | b = …………………… | | ………………………………………………………………………… | ………………………………………………………………………… | | ………………………………………………………………………… | c = …………………… | |  | ………………………………………………………………………… | | (6) |
| 3. | Calculate the bearing of:  N  N  N  124°  73°  A  B  C   1. B from C   ………………   1. C from B   ………………   1. B from A   ……………… | (3) |
|  | Total | (17) |

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|  | **Topic 11: Graphs** | **Mark** |
| 1. | a) On the grid draw and label the following    *x = 4*  *y = - 2*   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | |  |  |  |  |  |  | |  |  |  |  |  |  | |  |  |  |  |  |  | |  |  |  |  |  |  | |  |  |  |  |  |  | |  |  |  |  |  |  | |  |  |  |  |  |  | |  |  |  |  |  |  | |  |  |  |  |  |  | |  |  |  |  |  |  | |  |  |  |  |  |  | |  |  |  |  |  |  |   b) Complete the table and plot the graph of  *y = 2x + 1*   |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | *x* | -3 | -2 | -1 | 0 | 1 | 2 | 3 | | *y* |  |  | -1 |  | 3 |  |  |     c) What is the gradient of the graph  *y = 3x + 4* ? ……………………  d) What is the y intercept of the graph  *y = 2x – 5* ? …………………… | (2)  (2)  (2) |
| 2. | a) Circle the equations which have the same gradient.  y = 2x + 3 y = -4x + 3 y = 2x – 1 y = 7x + 1 y = x + 2  b) Circle the equations which have the same y intercept.  y = 2x + 3 y = -4x + 3 y = 2x – 1 y = 7x + 1 y = x + 2  c) Circle the equation which is steepest.  y = 2x + 3 y = -4x + 3 y = 2x – 1 y = 7x + 1 y = x + 2 | (3) |
| 3. | Alice cycles to the shops and back home again.  Here is her distance time graph.  a) How far has Alice travelled after 2 hours? ……………………  b) What speed is Alice travelling on the way to the shops? ……………………  c) How long does Alice stay at the shops? …………………… | (3) |
|  | Total | (12) |

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|  | **Topic 12: Statistics** | **Mark** |
| 1. | a) Complete the back to back stem and leaf diagram for the following heights (cm)   |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Male | 112 | 121 | 123 | 124 | 134 | 135 | 138 | 145 | 160 | 176 | 187 | | Female | 110 | 112 | 126 | 126 | 129 | 138 | 141 | 145 | 145 | 151 | 153 |  |  |  |  | | --- | --- | --- | | Female |  | Male | |  | 1 1 |  | |  | 1 2 |  | |  | 1 3 |  | |  | 1 4 |  | |  | 1 5 |  | |  | 1 6 |  | |  | 1 7 |  | |  | 1 8 |  | | Key: 134 = 4 │1 3 |  | Key: 134 = 1 3 │ 4 |   b) What is the range of the Male heights? ……………………  c) What is the mode of the Female heights? ……………………  d) What is the median of the Male heights ? …………………… | (2)  (3) |
| 2. | a) Draw a scatter graph for the following data for sparrow wing spans and length.  Length (cm)  Wing span (cm)  10  20  10  20   |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | Wing span (cm) | 20 | 15 | 9 | 11 | 14 | 12 | | Length (cm) | 19 | 16 | 8 | 10 | 15 | 13 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |   b) Describe the correlation  …………………….…………………….  c) Estimate the length of a sparrow with a  wing span of 10 cm.  …………………….  0 | (2)  (1)  (1) |
| 3. | Mrs Leake decides to open an ice cream shop and  lists how many of each she sells one day.  a) Complete this table   |  |  |  | | --- | --- | --- | | **Type** | **Frequency** | **Angle** | | Cornetto | 8 |  | | 99 | 15 |  | | Ice lolly | 9 |  | | Choc Ice | 4 |  | | **Total** |  |  |   b) Draw a pie chart of these results. | (1)  (2) |
|  | Total | (12) |