**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 $\frac{3}{7}$ into a decimal.

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| 3 | 7 |  |  |  |  |

e) Put these numbers in order of size smallest first 35% 0.4 $\frac{3}{5}$ $\frac{3}{4}$ 0.32 …….. ……… ……… ……… ……… f) What is the reciprocal of $\frac{2}{3}$ ? ………  | (3)(1)(1)(1) |
| 2. | Find $\frac{3}{10} $ of £24 ……………… | (2) |
| 3. | Calculate:a) $\frac{2}{5}+\frac{1}{6}$ b) $\frac{6}{7}-\frac{2}{3}$…………………….……………………. …………………….…………………….c) $\frac{2}{5}×\frac{3}{8}$ d) $\frac{4}{5}÷\frac{9}{10}$…………………….……………………. …………………….……………………. | (2)(2) |
| 4. | Isobel receives £60 for her birthday.She spends 25% on clothes.She spends $\frac{1}{5}$ 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.

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| 25°a | 205°b |
| a = …………………… | b = …………………… |
| …………………………………………………………………………………………………………………………………………………… | ……………………………………………………………………………………………………………………………………………………d60°85°150° |
| 100°c |  |
| c = …………………… | d = …………………… |
| …………………………………………………………………………………………………………………………………………………… | …………………………………………………………………………………………………………………………………………………… |

 | (4)(4) |
| 2. | Find the missing angles and give reasons for your answers.

|  |  |
| --- | --- |
| 110°a | 125°bc |
| a = …………………… | b = …………………… |
| ………………………………………………………………………… | ………………………………………………………………………… |
| ………………………………………………………………………… | c = …………………… |
|  | ………………………………………………………………………… |

 | (6) |
| 3. | Calculate the bearing of:NNN124°73°ABC1. 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*

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b) Complete the table and plot the graph of *y = 2x + 1*

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| --- | --- | --- | --- | --- | --- | --- | --- |
| *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 + 2b) Circle the equations which have the same y intercept.y = 2x + 3 y = -4x + 3 y = 2x – 1 y = 7x + 1 y = x + 2c) 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)

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 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)10201020

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Wing span (cm) | 20 | 15 | 9 | 11 | 14 | 12 |
| Length (cm) | 19 | 16 | 8 | 10 | 15 | 13 |

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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

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| --- | --- | --- |
| **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) |