**Year 8 Enhanced Standard: Assessment 3 Revision**

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|  | **Fractions** | **Mark** |
| 1. | Calculate the following. Give your answer in its simplest form.a) Work out  b) Work out $5\frac{3}{4}-2\frac{2}{3}$c) Work out $\frac{3}{4}×\frac{4}{9}$ d) Work out   | (8) |
| 2. | A school has 1200 pupils. 575 of these pupils are girls.  of the girls like sport. of the boys like sport. **Work out** the total number of pupils in the school who like sport. | (2) |
| 3. | Lewis wants to buy a new pair of trainers.There are 3 shops that sell the trainers he wants.

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| **Sports ‘4’ All** |  | **Edexcel Sports** |  | **Keef’s Sports** |
| **Trainers** |  | **Trainers** |  | **Trainers** |
| **£5 plus** |  | off |  | **£50** |
| 10 payments of £4.50 |  | usual price of £65 |  | Plus VAT at 20% |

a) Work out the cost of a pair of the trainers in Sports ‘4’ All.  b) Work out the cost of a pair of the trainers in Edexcel Sports.  | (2)(2) |
| 4. | a) Write these five fractions in order of size. Start with the smallest fraction.     b) Write these numbers in order of size. Start with the smallest number.65%  0.72    | (2)(2) |
| 5. | a) Write down the reciprocal of 4 b) Calculate the reciprocal of 0.8  | (2) |
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|  | **Angles** | **Mark** |
| 1. | *DE* is parallel to *FG.* Find the size of the angle y.Give a reason for your answer.  | (2) |
| 2 | *ABCD* is a quadrilateral. Work out the size of the largest angle in the quadrilateral.  | (2) |
| 3. | *ABC* is parallel to *DEFG*. *BE* = *EF*. Angle *ABE* = 38°.a) Find the value of *x* Give a reason for your answerb) Find the value of *y* | (2)(2) |
| 4. | Work out the size of an exterior angle of a regular pentagon.  | (1) |
| 5. | This is part of the design of a pattern found at the theatre of Diana at Alexandria.It is made up of a regular hexagon, squares and equilateral triangles.a) Write down the size of the angle marked *x*°.b) Work out the size of the angle marked *y*°.  | (1)(2) |
| 6. | The bearing of *B* from *A* is 035°. Calculate the bearing of *A* from *B*. | (1) |
| 7. | The diagram shows the position of each of three buildings in a town.The bearing of the Hospital from the Art gallery is 072°.The Cinema is due East of the Hospital.The distance from the Hospital to the Art gallery is equal to the distance from the Hospital to the Cinema.Work out the bearing of the Cinema from the Art gallery .  | (2) |
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|  | **Graphs** | **Marks** |
| 1. | (a) Copy and complete the table of values for *y* = 3*x* + 1

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| *x* | –2 | –1 | 0 | 1 | 2 | 3 |
| *y* | –5 |  | 1 |  |  |  |

b) **On graph paper**, draw the graph of *y* = 3*x* + 1c) Use your graph to find(i) the value of *y* when *x* = –0.8 (ii) the value of *x* when *y* = 8.  | (2)(2) (2) |
| 2. | *A* is the point (0, 1)*B* is the point (10, 6) Find the coordinates of the midpoint of *AB*. | (1) |
| 3. | The diagram shows 4 straight lines, labelled **P**, **Q**, **R** and **S.**The equations of the straight lines are**A**: *y* = 2*x***B**: *y* = 3 - 2*x***C**: *y* = 2*x* + 3**D**: *y* = 3Match each straight line, **P**, **Q**, **R** and **S** to its equation. | (3) |
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|  | **Statistics** |  |
| 1. | A DIY store bought 1750 boxes of nails.Barry took 25 of these boxes and counted the number of nails in each.The table shows his results.

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| **Number of nails** | **Number of boxes** |
| 14 | 2 |
| 15 | 9 |
| 16 | 8 |
| 17 | 4 |
| 18 | 2 |

a) What is the modal number of nails in a box?b) Work out the mean number of nails per box.c) Work out an estimate for how many of the 1750 boxes contain 16 nails. | (1)(2)(2) |
| 2. | Mary recorded the heights, in centimetres, of the girls in her class. She put the heights in order.

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| 132 | 144 | 150 | 152 | 160 | 162 | 162 | 167 |
| 167 | 170 | 172 | 177 | 181 | 182 | 182 |  |

(a) Find (i) the lower quartile  (ii) the upper quartile. (b) On a graph paper using the same scale, draw a box plot for this data. | (2)(3) |
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