**Year 10 ASSESSMENT Revision Homework 3 NON-CALCULATOR Core Standard**

**Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Teacher \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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| Fractions | /10 | Angles | /10 | Linear graphs | /10 | Presenting Data | /10 |

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|  | **Fractions** |  |
| **1.** | Write 0.21 as a fraction    ……………… | **1** |
| **2.** | Here are four numbers.    Write these numbers in order of size.  Start with the smallest number.  ……………… ……………… ……………… ……………… | **2** |
| **3.** | Write the reciprocal of 0.2  ……………… | **1** |
| **4.** | Work out what is half way between 42% and 0.34  ……………… | **1** |
| **5.** | Work out  a)  5 – 2 b) 12 -  ……………………………………………… ………………………………………………  ……………………………………………… ………………………………………………  ……………………………………………… ……………………………………………… | **3**  **2** |
|  | **TOTAL** | **10** |
|  | **Angles** |  |
| **1.** | The diagram shows a regular octagon and a regular hexagon.  *x*  Find the size of the angle marked *x*  You must show all your working.  *x* = ……………… | **3** |
| **2.** | *ABC* and *DEF* are parallel lines.  *BEG* is a straight line.  Angle *GEF* = 47°.  Work out the size of angle *x*.  Give reasons for your answer.  *x* = ………………  ………………………………………………………………………………………………………………………………………………  ………………………………………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………………………………… | **3** |
| **3.** | *ABC* is a straight line. *AB = BD*  Angle *BAD* = 25° Angle *BCD* = 70°  Work out the size of angle *x*.  Give reasons for your answer. *x* = ………………  ………………………………………………………………………………………………………………………………………………  ………………………………………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………………………………… | **4** |
|  | **TOTAL** | **10** |
|  | **Linear graphs** |  |
| **1.** | Line **L** is drawn on the grid below.  Find an equation for line **L**.  Give your answer in the form  *y* = *mx* + *c*  ……………………………………………… | **3** |
| **2.** | On the grid, draw the graph   1. *y* = 2*x* + 3   for values of *x* from 0 to 5  b) *y* = ½ *x* + 9  for values of *x* from 0 to 5  c) Write down the point  of intersection of the two lines.  ……………………………… | **3**  **3**  **1** |
|  | **TOTAL** | **10** |
|  | **Presenting data** |  |
| **1.** | There are 60 students at a college.  20 students study both French and Spanish.  A total of 43 students study Spanish.  13 students study French but not Spanish.  a)  Complete the Venn diagram for this information.    One of the students at the college is to be selected at random.  b)  Write down the probability that this student is in **F ∩ S** ………………  c)  Write down the probability that this student is in **F ∪ S** ……………… | **4**  **1**  **1** |
| **2.** | Carlos has a cafe in Clacton. Each day, he records the maximum temperature in degrees Celsius (°C) in Clacton and the number of hot chocolate drinks sold.  The scatter graph shows this information.    On another day the maximum temperature was 6 °C and 35 hot chocolate drinks were sold.  a) Show this information on the scatter graph.  b) Describe the relationship between the maximum temperature and the  number of hot chocolate drinks sold.  ………………………………………………………………………………………………………………………………………………  One day the maximum temperature was 8 °C.  (d) Estimate how many hot chocolate drinks were sold.  ……………… | **1**  **1**  **2** |
|  | **TOTAL** | **10** |