**Year 8 Enhanced Standard: Assessment 2 Revision Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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|  | Topic 5: Geometry & Measures | Mark |
| 1. | trap5Calculate the area of this trapezium.    ……………………………… cm2 | (2) |
| 2. | Calculate the circumference of this circle.  8cm  ……………………………… cm | (1) |
| 3. | Calculate the area of this circle.  15cm  ……………………………… cm2 | (2) |
| 4. | Find the area of the sector  8 cm  ……………………………… cm2 | (2) |
| 5. | Find the area of this shape.  12 cm  9 cm  ……………………………… cm2 | (3) |

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|  | Topic 6: Ratio Proportion & Rates of change | Mark |
| 1. | Pheobe, Polly and Andy share £270.  Pheobe gets three times as much as Andy who gets twice as much as Polly  Work out how much each person gets.  Pheobe ……………………………… Polly ……………………………… Andy ……………………………… | (2) |
| 2. | At a school the ratio of girls to boys is 11 : 9.  There are 124 more boys than girls.  Work out the total number of students  ……………………………… | (2) |
| 3. | Asif is going on holiday to Turkey.  The exchange rate is £1 = 3.5601 lira.  Asif changes £550 to lira.    a) Work out how many lira he should get.  Give your answer to the nearest lira.  ……………………………… lira  Asif sees a pair of shoes in Turkey.  The shoes cost 210 lira. Asif does not have a calculator.  He uses £2 = 7 lira to work out the approximate cost of the shoes in pounds.  b) Use £2 = 7 lira to show that the approximate cost of the shoes is £60  ………………………………………………………………………………………………………………………………………………………………………………  ………………………………………………………………………………………………………………………………………………………………………………  c) Is using £2 = 7 lira instead of using £1 = 3.5601 lira a sensible start to Asif’s method to work out the cost of the shoes in pounds?  You must give a reason for your answer.  ………………………………………………………………………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………………………………………………………………… | (2)  (1)  (1) |
| 4. | TRESCO Supermarket Sells cheese on its deli counter for £1.88 per 160g  WEIGHTROSE Supermarket sells cheese on its deli counter for £13.55 per kg  Which is the best buy?  ……………………………… | (2) |
|  | Topic 7: Sequences | Marks |
| 1. | Here are the first five terms of a number sequence. 3 8 13 18 23  a) Explain why 387 is **not** a term of the sequence.  ………………………………………………………………………………………………………………………………………………………………………………  ………………………………………………………………………………………………………………………………………………………………………………  b) What is the nth term for this sequence?  ………………………………  c) Work out the value of the 50th term in the sequence.  ……………………………… | (1)  (2)  (1) |
| 2. | Find the nth term of the following sequence 3, 9, 19, 33, 51  ……………………………… | (3) |
| 3. | The *n* th term of a sequence is *n2* + 4  Alex says  “The *n* th term of the sequence is always a prime number when *n* is an odd number.”  Alex is wrong.  Give an example to show that Alex is wrong.  ………………………………………………………………………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………………………………………………………………… | (1) |
| 4. | Prove that the sum of three consecutive numbers is always a multiple of 3.  ………………………………………………………………………………………………………………………………………………………………………………  ………………………………………………………………………………………………………………………………………………………………………………  ………………………………………………………………………………………………………………………………………………………………………………  ………………………………………………………………………………………………………………………………………………………………………………  ………………………………………………………………………………………………………………………………………………………………………………  ……………………………………………………………………………………………………………………………………………………………………………… | (2) |
|  | Topic 8 Probability |  |
|  | Four teams, City, Rovers, Town and United play a competition to win a cup.  Only one team can win the cup.  The table below shows the probabilities of City or Rovers or Town winning the cup.   |  |  |  |  | | --- | --- | --- | --- | | City | Rovers | Town | United | | 0.38 |  | 15% | *x* |   Work out the probability of united winning the cup.  ……………………………… | (1) |
|  | The table shows information about the number of fillings the students in a class had last year.   |  |  | | --- | --- | | Number of fillings | Number of students | | 0 | 10 | | 1 | 5 | | 2 | 4 | | 3 | 2 | | More than 3 | 1 |   The teacher is to choose a student at random from the class.  Find the probability that they will choose a student who had:  a) exactly 1 filling, …………………  b) 2 or more fillings …………………  c) not having more than 3 fillings ………………… | (3) |
|  | Julie throws a fair red dice and then a fair blue dice.  a) Complete this tree diagram.  b) Calculate the probability of both dice landing on a 6.  …………………  c) Calculate the probability of both getting at least one 6.  ………………… | (3)  (1)  (2) |