**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 sector8 cm ……………………………… cm2 | (2) |
| 5. | Find the area of this shape.12 cm9 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 PollyWork 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.  ……………………………… liraAsif 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 160gWEIGHTROSE Supermarket sells cheese on its deli counter for £13.55 per kgWhich is the best buy?………………………………  | (2) |
|  | Topic 7: Sequences | Marks |
| 1. | Here are the first five terms of a number sequence. 3 8 13 18 23a) 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* + 4Alex 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 | $$\frac{1}{4}$$ | 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.

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| --- | --- |
| 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) |