**Year 9 Core Standard: Assessment 3 Revision Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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|  | **Topic 8: Probability** | **Mark** |
| 1.S | Mark on the number line with an arrow the probability of an event occurring:1. Throwing a number greater than 6 on a fair 6 sided die.
2. Throwing an odd number on a fair 6 sided die.
3. Throwing a number less than 7 on a fair 6 sided die.
4. Throwing a number less than 5 on a fair 6 sided die.

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  |  (4) |
| 2.F | a) The probability it will rain tomorrow is **0.93**. What is the probability that it will not rain? ……………………b) Timmy throws a normal six sided die **1200** times.  How many times would he expect to throw a **5** ? ……………………c) A spinner can land on Red, Green, Pink or Blue.

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| --- | --- | --- | --- | --- |
| Colour | Red | Green | Pink | Blue |
| Probability | $$\frac{1}{10}$$ | 0.3 |  | 0.05 |

 1. What is the probability that the spinner lands on Pink ?

……………………1. What is the probability that the spinner lands on Red or Green ?

…………………… |  (1) (1)(2)(1) |
| 3.F | Two spinners, one numbered from 1,2,3,4,5 and the other 2,4,6,8 , are spun and the **product** of the scores is noted.Complete the sample space diagram with all the possible outcomes.

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| x | 2 | 4 | 6 | 8 |
| 1 |  |  |  |  |
| 2 |  |  |  |  |
| 3 |  |  |  |  |
| 4 |  |  |  |  |
| 5 |  |  |  |  |

What is the probability of getting an odd number ? ……………………What is the probability of getting a prime number ? ……………………What is the probability of getting a square number ? ……………………What is the probability of getting a 7 ? ……………………What is the probability of getting a number less than 50 ? …………………… | (6) |
|  |  Total  | (15) |

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|  | **Topic 9: Fractions Decimals Percentages** | **Mark** |
| 1.S | Write the following as fractions in their simplest form.1. 0.25 …………………… b) 30% ……………………

c) 0.05 …………………… d) 45% …………………… | (4) |
| 2.F | Write these five fractions in order of size.  Start with the smallest fraction.

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| $$\frac{3}{4}$$ | $$\frac{1}{2}$$ | $$\frac{5}{6}$$ | $$\frac{5}{12}$$ |
| ……………… | ……………… | ……………… | ……………… |

 | (2) |
| 3.S | a) Find $\frac{1}{5} $ of 20 .……………………b) Find $\frac{3}{5} $ of 20 …………………… | (1)(1) |
| 4.F | 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) |
| 5.M | 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.F | 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 = …………………… |
| …………………………………………………………………………………………………………………………………………………… | …………………………………………………………………………………………………………………………………………………… |

 |   (2) (2) |
| 2.S | Name the following shapes:

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| --- | --- | --- |
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| *……………………* | *……………………* | *……………………* |
|  |  |  |
| *……………………* |  | *……………………* |

 |   (5) |
| 3.M | What is the sum of the interior angles of a pentagon?   ……………………  |  (1) |
|  |  Total  | (10) |

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|  | **Topic 11: Graphs** | **Mark** |
| 1.S | a) On the grid draw and label the following lines   *x = 4*  *y = - 2*  | (2) |
| 2.M | 1. 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 |  |  |

 1. What is the gradient of the graph *y = 3x + 4* ? ……………………
2. What is the y intercept of the graph *y = 2x – 5* ? ……………………
 | (2)(1)(1) |
| 3.F | 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? ……………………d) When was Alice travelling fastest …………………… |    (4) |
|  |  Total  | (10) |