**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.   1  0   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | |  |  |  |  |  |  | | (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.   |  |  |  |  |  | | --- | --- | --- | --- | --- | | Colour | Red | Green | Pink | Blue | | Probability |  | 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.   |  |  |  |  |  | | --- | --- | --- | --- | --- | | 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.   |  |  |  |  | | --- | --- | --- | --- | |  |  |  |  | | ……………… | ……………… | ……………… | ……………… | | (2) |
| 3.  S | a) Find of 20 .……………………  b) Find of 20 …………………… | (1)  (1) |
| 4.  F | Calculate:  a) b)  ………………………………………… …………………………………………  c) d)  ………………………………………… ………………………………………… | (2)    (2) |
| 5.  M | Isobel receives £60 for her birthday.  She spends 25% on clothes.  She spends 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.   |  |  | | --- | --- | | 25°  a | 205°  b | | a = …………………… | b = …………………… | | …………………………………………………………………………  ………………………………………………………………………… | …………………………………………………………………………  …………………………………………………………………………  d  60°  85°  150° | | 100°  c |  | | c = …………………… | d = …………………… | | …………………………………………………………………………  ………………………………………………………………………… | …………………………………………………………………………  ………………………………………………………………………… | | (2)  (2) |
| 2.  S | Name the following shapes:   |  |  |  | | --- | --- | --- | |  |  |  | | *……………………* | *……………………* | *……………………* | |  |  |  | | *……………………* |  | *……………………* | | (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*  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | |  |  |  |  |  |  | |  |  |  |  |  |  | |  |  |  |  |  |  | |  |  |  |  |  |  | |  |  |  |  |  |  | |  |  |  |  |  |  | |  |  |  |  |  |  | |  |  |  |  |  |  | |  |  |  |  |  |  | |  |  |  |  |  |  | |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | *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) |