## Revision Maze

Find your way through the maze by finding a path of correct squares from the left side of the maze to the right side of the maze. Rules: you can only move up, down, left or right and on squares that are correct!

| ... is a prime number | ... is $25 \%$ of a multiple of 7 | probability of ... occuring is less than half | 5th term in sequence is 32 | ... is equivalent to $\frac{a-b}{4}$ | ... passes through the point $(0,4)$ | ... is a true statement | $\ldots$ is a correct formula |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 3 | rolling a multiple of 3 on a fair 6 sided dice | $2,4,8,16$ | $\frac{8 a-8 b}{32}$ | line passing through $(3,5)$ and $(9,7)$ | the sum of three consecutive numbers is a multiple of 3 | pressure = force x area |
| 2 | 7 | rolling a square number on a fair 6 sided dice | $\begin{gathered} \text { nth term }= \\ 7 n-2 \end{gathered}$ | $\frac{1}{4} a-b$ | the line $y=2 x-4$ | $\sqrt{a+b}=\sqrt{a}+\sqrt{b}$ | $x=\frac{-b \pm \sqrt{b^{2}+4 a c}}{2 a}$ <br> (quadratic formula) |
| 13 | 11 | winning a game where probability of losing is 0.56 | $\begin{gathered} \text { nth term }= \\ 6 n+2 \end{gathered}$ | $\frac{3}{8}(a+b)-\frac{1}{8}(a-b)$ | graph of $a$ against $b$ if $a \propto b$ | $\sqrt{20}=2 \sqrt{5}$ | $\sqrt{a^{2}+b^{2}}=c^{2}$ <br> (Pythagoras' Theorem) |
| 87 | 31.5 | picking and eating two red sweets from a bag with 6 red and 4 blue sweets | fibonacci sequence with first term 8 and second term 9 | $\frac{a^{2}-b}{4 a}$ | line with gradient 4 passing through $(8,36)$ | $\sqrt{2} \times \frac{1}{2^{2}}=2^{-\frac{3}{2}}$ | $\begin{gathered} \text { density }= \\ \text { mass } \div \text { volume } \end{gathered}$ |
| 100 | 24.5 | choosing, at random, a prime number between 1-12 (inclusive) | $\begin{aligned} & \text { nth term }= \\ & 2 n^{2}-5 n+7 \end{aligned}$ | $\frac{a^{2}-b^{2}}{4 a+4 b}$ | line perpendicular to $y=8 x-12$ passing through $(8,3)$ | every positive integer is divisible by some prime | time $=$ <br> speed $\div$ distance |
| 119 | 385 |  | $\begin{gathered} 2592,864 \\ 288,96 \end{gathered}$ | $\frac{a-b}{8}-\frac{a-b}{4}$ | circle with equation $x^{2}+y^{2}=4$ | $\sqrt{a^{2}+b^{2}}=a+b$ | volume of prism= area of any side $x$ length |

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| 119 | 385 | $\begin{array}{llll} \hline P(A) & ? & 0.1 & 0.3 \\ \hline \end{array}$ | $\begin{gathered} 2592,864, \\ 288,96 \end{gathered}$ | $\frac{a-b}{8}-\frac{a-b}{4}$ | circle with equation $x^{2}+y^{2}=4$ | $\sqrt{a^{2}+b^{2}}=a+b$ | volume of prism= area of any side $x$ length |

