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- Write your name at the top of this exam.
- This exam has 11 questions and 9 pages.
- In order to receive credit, you must show your work.
- Simplify your answers whenever possible. Keep your answers exact.
- Calculators, phones, and other electronic devices are not permitted.

| Question <br> 1 | Points | Score |
| :---: | :---: | :---: |
| 2 |  |  |
| 3 |  |  |
| 4 |  |  |
| 5 |  |  |
| 6 |  |  |
| 7 |  |  |
| 8 |  |  |
| 9 |  |  |
| 10 |  |  |
| 11 |  |  |
| Total |  |  |

1. This is a numbered problem.
2. This is the second numbered problem.
3. Choosing an answer to this questions at random, what is the chance that it will be correct?
(a) $25 \%$
(b) $50 \%$
(c) $70 \%$
(d) $25 \%$
4. Solve the Riemann Hypothesis. Be sure to justify each step.
5. Write an answer to an unasked question in the space below.
6. Write an award winning level novel in the space below.
7. Answer the following parts completely.
(a) What is Mathematics?
(b) Why are we here?
(c) What is the meaning of life?
8. Choose an option.
(a) Here is an option.
(b) Here is another.
(c) A third choice!
9. What is $2+2=$ ?
(a) Martha Washington
(e) -4
(b) Mars
(f) Cannot be determined.
(c) 17
(g) None of the above.
(d) 4
(h) All of the above.
10. Draw a graph below.

11. Draw a graph below.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

