## **Imitation Game**

Allan Turing was a British pioneering computer scientist, mathematician, logician, cryptanalyst, philosopher, mathematical biologist, and marathon and ultra distance runner. He was highly influential in the development of computer science, providing a formalization of the concepts of "algorithm" and "computation" with the Turing machine, which can be considered a model of a general purpose computer. Turing is widely considered to be the father of theoretical computer science and artificial intelligence.



- 1. How old was Allan Turning when he became a fellow at Cambridge?
- 2. How old was Newton when he discovered binomial Theorem?
- 3. How old was Einstein when he wrote four papers that changed the world?
- 4. What was the name of the Top secret German code? the world? The most difficult problem in the world?

The greatest decryption device in

- 5. What do the Germans do every day promptly at midnight?
- 6. How many possibilities exist every single day?
- 7. How many divisions exist in the British Military intelligence?
- 8. The German Radio signals could be intercepted but what was the trick?
- 9. Ten men checking one setting a minute for 24 hours every day seven days a week ... How many days would it take to check each of the possible settings?
- 10. Who put Alan Turing in charge of the project?
- 11. According to Turing why do people like violence?
- 12. How does Alan Turing find new employees to work for the project?
- 13. How long did it take the first candidate, Joan Clarke, to finish the exam?
- 14. Why was the hour of midnight so important?
- 15. What name did Alan Turning give his machine?
- 16. Alan Turning's work area and desk were searched. What was he suspected of?
- 17. How much additional time does the cryptograph group get?
- 18. Mathew 7:7 was the key to what communication?



- 19. Why does Allan Turing propose to Joan Clark?
- 20. Why can't Allan Turing tell anyone he is gay?
- 21. According to Turing, how did love lose Hitler the entire war?
- 22. What was the predictable three words in every weather report at 6:00 am every morning?
- 23. Explain moral dilemma the group was faced with when they considered saving the British passenger ship about to be attacked--
- 24. What solution is worked out for the team?
- 25. What did they code name the program?
- 26. Why does Turing not expose the Soviet spy?
- 27. What advice does Turning give about keeping secrets?
- 28. Why was a Soviet agent intentionally placed at Bletchley Park?
- 29. What was Allan Turnings fiancée's response to Allan's breaking off the engagement?
- 30. How much longer did the war drag on after the enigma code was broken?
- 31. Why was it necessary to destroy everything after the war was over?
- 32. Why was Allan Turing on medication after the war?
- 33. What happened to Allan Turing on June 7<sup>th</sup>, 1954?

How old was he?

- 34. What is a Posthumous Royal Pardon?
- 35. Historians estimate that breaking enigma shortened the war by how much? Saving
  - Saving how many?

36. What do we call "Turing Machines" today?

"Sometimes it is the people who no one imagines anything of "
who do the things no one can imagine"

**Ultra** – the designation adopted by British military intelligence in June 1941 for wartime intelligence obtained by breaking high-level encrypted enemy radio and teleprinter communications at the government Code and Cypher School at **Bletchley Park**. Ultra became the standard designation among the western Allies for all such intelligence. The name arose because the intelligence thus obtained was considered more important than that designated by the highest British security classification then used (**Most Secret**) and so was regarded as **Ultra secret**. Several other cryptonyms had been used for such intelligence. The U.S. used the codename **Magic** for its decrypts from Japanese sources.



**Bombe Machine**