Name _____ Date _____

Alan Turing

Use the text to answer each question below.

1. Alan Turing was born on June 23, 1912, in London. He became interested in mathematics and science early in life, while attending the Sherborne School, a well-regarded boarding school. Later, he attended King's College in Cambridge, England, and studied there from 1931 through 1934. He was an excellent student. Turing earned a fellowship with King's College after graduation. During the fellowship, he wrote a paper about a theoretical "Universal Machine" capable of correctly solving any solvable math problem. Published all the way back in 1936, this paper laid the groundwork for modern computing, including the machines we use in our daily lives.

Based on this passage, what is one technological innovation that can be credited to Alan Turing's research?

A. Computers

B. Penicillin

C. The steam engine

D. Telephone communication

2. Turing earned a PhD from Princeton University in New Jersey in 1938. By the time he returned to Cambridge, Nazi Germany was gaining power and influence throughout Europe, largely due to their cipher device, Enigma, that hid military messages in code. Turing began working for a British codebreaking operation during World War II. His job was to lead a team that designed a codebreaking machine known as the Bombe. During this time, Turing and his team used the Bombe to decode as many as 84,000 intercepted Nazi messages each month. This allowed the Allied Forces to better anticipate what the Nazis were planning. Many historians credit Turing and the team who created the Bombe for dramatically altering the course of the war, with some speculating that the information it yielded saved millions of lives by shortening the war.

What is the main idea of this passage?

A. Alan Turing's work with the Bombe was an essential part of helping Allied forces win World War II.

B. Nazi Germany's cipher device, Enigma, was a complex system that hid military messages in dense code.

C. Due to his education in mathematics, Turing was well-equipped for decoding intercepted messages.

D. The Bombe was able to decode as many as 84,000 intercepted messages each month.

3. Turing was responsible for leading a team whose work historians speculate significantly shortened World War II and saved countless lives. But his own life ended tragically less than a decade after the war ended. Despite his heroic service to his country, he was arrested for “gross indecency” in 1952 for the crime of being gay. Homosexuality was still illegal in Britain at this time, and the arrest led to a criminal conviction. Turing was fired from his job with the codebreaking operation, and worse, sentenced to hormone conversion therapy, a cruel, pseudoscientific practice of hormone therapy that alleged to “cure” him of his homosexuality. The therapy had significant impact on Turing's mental health, and he died by cyanide poisoning at age 41. His death was ruled a suicide. In 2009, more than 50 years later, the British government finally issued an official apology for their treatment of Alan Turing.

With which of the following would the author of this passage most likely agree?

A. Turing should have left Great Britain and moved to the United States after the war.

B. Turing’s contribution to the end of World War II is probably overestimated.

C. The British government never should have apologized for their treatment of Turing.

D. Turing was a war hero who deserved better treatment from British society and government.