[Episode 21 - Florence Nightingale Transcript]

Hello everybody. My name is Tori Roberts and today I will be discussing the various accomplishments of the woman who is become known as the founder of modern nursing, Florence Nightingale. Later, you'll get to hear a little bit more about her mathematical accomplishments, but first a little bit more about her early life. Florence Nightingale was born on May 5, 1820 in Florence, Italy, the city after which she was named, but her family soon moved to London where she grew up. Being a part of a wealthy Victorian family, she was offered many academic opportunities, and she consistently thrived in her studies. She was especially interested in her math classes in school, and continued to study math independently into her young adulthood. Nightingale later taught and tutored children in math, and it has been found in her old notes and lesson plans that she was especially interested in girls' education. She argued that girls were not being given fair opportunities in their academics, and she didn't really consider herself to be an extremist in this area, but she did strongly believe that girls weren't able to reach their full potential with the school system that was in place. She used her position to practice and promote equal education in children until she finished this section of her career. After teaching, Florence Nightingale began practicing nursing. At this time though, nursing was not a wellrespected occupation, and it was mostly expected to be pursued by the uneducated lower class. Nursing was her passion though, and she believed it was the best way she could make a positive impact on people's lives. In 1850, she enrolled as a nursing student at the University of Protestant in Kaiserswerth, Germany, and took a job in Harley Street Hospital in London after graduating. She was then promoted to head nurse after just one year because of her dedication and natural aptitude for the job leadership. This was all happening around the 1950s near the start of the Crimean War which began in October of 1853. Because Nightingale was guickly gaining recognition for her abilities in her new career. She was recruited in 1854 to gather a team of nurses to gather to Crimea to assist in caring for injured soldiers. Before her arrival, many of the soldiers were dying and their treatment for their injuries was becoming useless because they were not making it through the illness and disease of their recovery place. Once she got there it was clear that the military hospital was horribly unsanitary, so she put a new system in place with strict sanitation and hygiene guidelines. In the summer of 1854, she was able to return home to London, and she received a reward from Queen Victoria for her efforts there in Crimea. After returning, she devoted the next few years to training nurses, and the Florence Nightingale Training School and Home for Nurses at St. Thomas' Hospital was opened in 1860. Prior to the school opening however, she was diagnosed with Crimean fever, which is a form of brucellosis that she picked up while assisting the soldiers, and she was diagnosed with this in 1858. In

her poor health, she was bedridden often for the remainder of her life really, but she still continued to work towards opening the school and many of her academic goals. She was later elected to her membership in the statistical society of England that same year as she began contributing her mathematical interests to her nursing. She also published an anthology called "Notes on Hospitals" in 1859. As her school thrived and advances were being made in the nursing world, Nightingale continued crafting the perfect system in the hospitals. Using her knowledge of math and statistics, she created colorful polar area diagrams to dramatize the medical data she was uncovering. With the primary goal to improve the general hospital system, she struggled to convince authorities that her research was valid and useful, but her statistical approach couldn't be argued with, and they eventually agreed to carry out her proposed reforms. Now, because of this and many other aspects of her personality, Florence Nightingale is an exceptional example of how women can use their knowledge and education to fight against the difficulties we face in reaching positions of power and authority. She was repeatedly discredited in her attempts to make change in what she believed in, but nevertheless she persisted. Thanks for listening.