MTH 6610 - History of Math Reading Assignment #3

Term V - 2024

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Instructions. Read pages 72 - 102 to find the answers to these questions in your reading.

- 1. What manuscript reveals that the Babylonians knew the Pythagorean Theorem 1000 years before Pythagoras was born?
- 2. What technique did the Babylonians have for generating "Pythagorean Triples"? (i.e., numbers, a, b, c such that $a^2 + b^2 = c^2$)
- 3. What manuscript reveals that the "Late Egyptians" knew of the Pythagorean Theorem?
- 4. From what time period is this manuscript from?
- 5. What allowed the Greeks to progress far beyond their Babylonian and Egyptian predecessors in mathematics?
- 6. Name six well-known Greek mathematicians of antiquity.
- 7. What early life experiences prepared Thales for a prodigious mathematical career?
- 8. What is largely considered to be Thales' greatest contribution to mathematics?
- 9. What "theorems" from "Euclidean Geometry" are generally credited to Thales?
- 10. How was Thales able to measure the height of the Great Pyramid?
- 11. Give two explanations as to how Thales was able to compute the distance of a ship from shore.
- 12. What possible link existed between Thales and Pythagoras?
- 13. What early life experiences may have prepared Pythagoras for a prodigious mathematical career?
- 14. Where was the Pythagorean School founded?
- 15. What four principal areas of study did the Pythagoreans engage in?
- 16. True or false: Women were banned from the Pythagorean School.

- 17. Who was Theano?
- 18. Why is so little known, regarding the mathematical advances made by the Pythagoreans?
- 19. What particular area of study may have provided the Pythagoreans with their strongest evidence that everything in the Physical universe can be attributed to, and modeled by, numbers? (specifically, integers)

Also, do the following exercises from our text:

- p. 80 #1-4
- p. 103 #1, 3, 6, 9