

HISTORY OF MATHEMATICS — ASSIGNMENT ONE

- (1) (3 points) Egyptian arithmetic was based on addition. How was multiplication calculated?
- (2) (3 points) When were Euclid's "Elements" written?
- (3) (4 points) Zu Chongzhi provided a very close approximation of π . What was its value?
- (4) (3 points) Could you define "amicable numbers"?
- (5) (3 points) Who wrote "Ars Magna"?
- (6) (1 points) Who introduced the modern notation for differentiation and integration?
- (7) (2 points) "La Géométrie" was an appendix of an important work by René Descartes. Which work was it?
- (8) (4 points) Could you state the Euler-Lagrange equation?
- (9) (3 points) Who realised that matrices could represent linear transformations?
- (10) (2 points) Who wrote "On the Hypotheses which Lie at the Bases of Geometry"?
- (11) (3 points) Who wrote "Grundzüge der Mengenlehre" in 1914, providing the axioms of topological spaces?
- (12) (1 points) Who proved the Poincaré conjecture?