

MTH 306 History of Math, Fall 2025

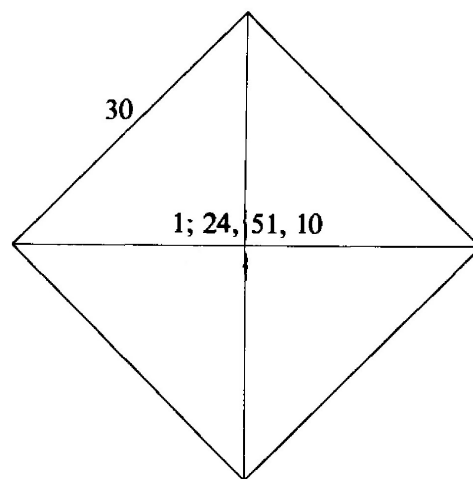
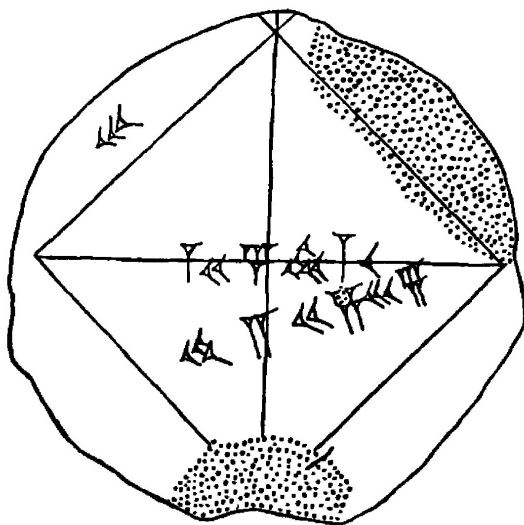
For Monday Sep 8th:

- (1) Read the handout:
 - (p1–2) look at the highlighted example of solving word problems by arithmetic, i.e. without algebra
 - (p3–6) the method of false position
 - (p7–17) Section 2.5 on Babylonian mathematics
 - (p18–24) Plimpton 322
- (2) Think about problem 19 from the previous handout, can you do this by arithmetic? What about problems 3 and 9 from Section 2.5?

HW2 Due Wed Sep 10th

- (1) Describe a method for converting fractions into base 60. Use it find $1/11$ in base 60.
- (2) The translator of the following tablet took the list of numbers 1, 24, 51 10 and interpreted it as $1 ; 24 \ 51 \ 10$. How close to $\sqrt{2}$ is this?

(g) *YBC 7289*



- (3) Describe a method for finding the base 60 representation of $\sqrt{2}$ and use this to find the first 4 places. Does it agree with the value given on the tablet?
- (4) What is the second row of numbers? Where would you insert the divider ; between units and sixtieths? Hint: what do you think the number 30 refers to?