

**Assignment 12**

- A. Expressing your answer in sexagesimal notation, add 30, 22, 16 and 15, 56, 18 .
- B p. 26  
13, 14
- C. Turn in on Thursday, February 21:  
Use the Babylonian method, either version, to find  $\sqrt{19}$  to two iterations.
- D. Using the class handout with multiples of 6 and 8, find the product of 46 and 38. Your answer should be expressed in terms of sexagesimal notation.

**Assignment 13**

- A. Using the Babylonian method of solving systems of equations, find the solution to the following system:

$$\begin{aligned}xy &= 144 \\x+y &= 26\end{aligned}$$

- B. Using the Babylonian method of solving systems of equations, find the solution to the following system:

$$\begin{aligned}xy &= 21 \\x - y &= 4\end{aligned}$$

- C. Use our completing the square argument to solve the following problem. Write the solution in the manner that the Babylonians would have. You do not need to use sexagesimal numbers; you may use our numbers.

*I have added up a square and seven of its sides and get 60. Find the side of the square.*

- D. Use our completing the square argument to solve the following problem. Write the solution in the manner that the Babylonians would have. You do not need to use sexagesimal numbers; you may use our numbers.

*From the area of my square I have subtracted 12 sides and get 160. Find the side of the square.*