Mathematics 446 — second homework

This is due next Monday, September 19.

1. Find the base 60 expressions for (a) 180, (b) 456, (c) $5,000$, and (d) $314,678$.

2. Find the infinite sexagesimal expansion for $1/3$, $1/5$, $1/11$, $1/13$.

3. Find the first 8 'digits' of $\sqrt{2}$ in base 60. (This is hard.)

4. Read the selection by Knuth handed out in class Wednesday, September 14. Transliterate as well as you can the numbers in rows 8–12 (not counting the head) of the tablet—first into sexagesimal form, then into decimal. Are there any errors there?