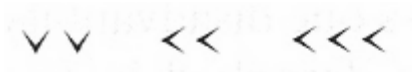


MTH 110
Quiz 2
Summer 2009

Show all work in a clear and organized fashion. Clearly indicate your answers.
25 points possible.

0. (1 pt.) One free point.
1. (4 pts.) Write the Babylonian numeral as a Hindu-Arabic numeral.



2. (4 pts.) Write the Mayan numeral as a Hindu-Arabic numeral.



3. (4 pts.) Convert the base ten numeral to a numeral in the given base.

732 to base four

4. (4 pts.) Convert the base ten numeral to a numeral in the given base.

1756 to base three

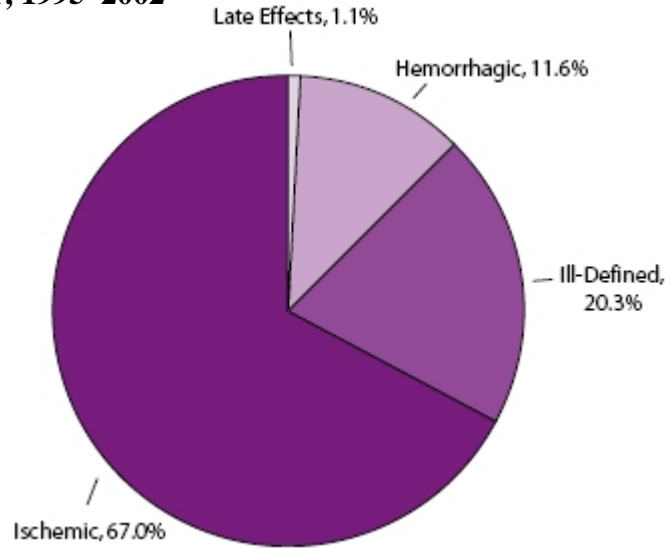
5. (4 pts.) A full-time employee who works 40 hours per week earns \$24.65 per hour.

(a) Without using a calculator, **estimate** that person's annual income.

(b) Explain in complete sentences how you did part (a).

6. (4 pts.) The circle graph shows the percentages of 3,807,605 stroke hospitalizations categorized by type of stroke.

Percentage of stroke hospitalizations, by stroke subtype—Medicare beneficiaries ages 65 and older, 1995–2002



Source:

http://www.cdc.gov/dhdsp/library/stroke_atlas/section_one.htm (accessed June 21, 2009)

- (a) Without using a calculator, **estimate** the number of ischemic stroke hospitalizations.
- (b) Explain in complete sentences how you did part (a).

Optional Bonus Problem. Convert the binary numeral $1\ 011\ 011\ 101_{\text{two}}$ to a Mayan numeral.