Get the name and number of whole days aloft from the astronaut (we trust her not to give us incorrect data).

Show the astronaut what monies they will be getting and not getting from their time aloft. This information should be:

- name and days aloft
- gross pay and the number of weeks and leftover days this was based on
- how much tax they owe
- the amount taken out for their contribution to THE OLD ASTORNAUTS RETIREMENT HOME FUND
- finally their paltry take-home pay

The pay scale for Astronauts is $1,434.23 for each whole week aloft and $200 for each whole day leftover.

The tax rate in Houston is 7.14%.

The contribution to the retirement fund is:

\[(\text{the absolute value of the cosine of the pre-tax amount})^{2/3} \times \text{tax amount}\]

\[\text{this amount is always taken to the next higher whole dollar}\]

+ some random number in the range:

\[\left[\text{(the pre-tax amount)/100, of the pre-tax amount/90}\right]\]

Hint: get everything else working before trying this messy calculation.

And of course, this is about top-down problem solving and functions.