

PRACTICAL 1

Compute the following:

1. (123 - 45) / 4 + 4 * (72 / 2.34 - 3)

```
itmbu-20@itmbu20-V30a-24IIL:~

R version 3.6.3 (2020-02-29) -- "Holding the Windsock"
Copyright (C) 2020 The R Foundation for Statistical Computing
Platform: x86_64-pc-linux-gnu (64-bit)

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Natural language support but running in an English locale

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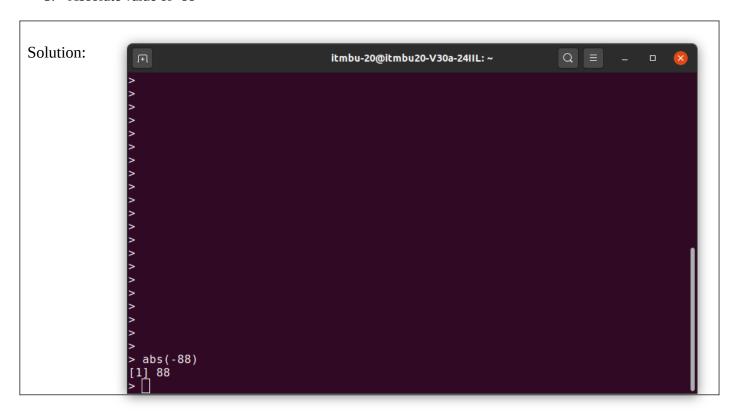
Type 'demo()' for some demos, 'help()' for on-line help, or
'help.start()' for an HTML browser interface to help.
Type 'q()' to quit R.

> (123-45)/4+4*(72/2.34-3)
[1] 130.5769
>
```

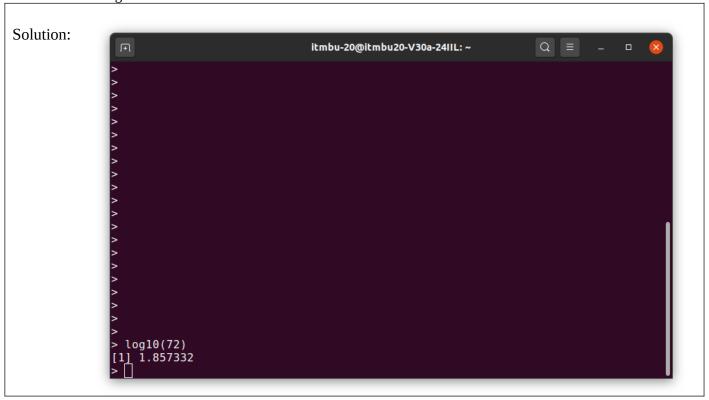
2. $(((20*3)-14)^3)$



3. Absolute value of -88



4. Base 10 logarithm of 72





5. Round the square root of 50 to the fourth decimal

6. e^1.45 - 2.612



- 7.
- a. Assign a variable year_born to 1984
- b. Assign a variable year_current to 2014
- c. Assign a variable age and compute it
- d. Return True / False if person is eligible to vote in US (if age is greater than or equal to 18)



6. Given: formula for area of circle is pi*r2 Given: Area = 100

a. Write statement to find r. (Hint: utilize "sqrt" and "pi" functions)

Solution:

- 7. Given: went to lunch and pre-tax bill was \$45.90
 - a. Compute subtotal: add NYC tax of 8.875%
 - b. Compute 15% tip on subtotal
 - c. Compute 20% tip on subtotal



8.

- a. Assign a variable customers to 500
- b. Assign a variable pizza_price to \$20
- c. Assign a variable todays_revenue (customers * pizza_price) and compute today's revenue
- d. Is today's revenue greater than yesterday's revenue of \$7,000 and less than tomorrow's projected revenue of \$11,000? Show the code that would answer the following question.

```
Solution:
                                  itmbu-20@itmbu20-V30a-24IIL: ~
                                                                                   customers=500
     pizza=20
     todays revenue = customers * pizzza
  Error: object 'pizzza' not found
    todays revenue = customers * pizza
     todays revenue
  [1] 1000\overline{0}
    yesterdays revenue=7000
     todays revenue > yesterdays revenue
   [1] TRUE
    tomorrows revenue=11000
     todays_revenue < tomorrows_revenue</pre>
     todays_revenue > yesterdays_revenue & todays_revenue < tomorrows_revenue
     .] TRUE
```
