October 19, 2021
Cedars Math
Mr. Rasmusen

Homework: Studying for Test 2

(1) You MUST get together, in person, with someone else from the class for at least 1 hour. Maybe have a Studying Sleepover the night before the test.

(2) Bring your Test 1 to class and give it to me. I'd like to compare the kind of mistakes you make on each test.

(3) Words: Exponent. Endless loop. Mixed number. Prime. Factor. Prime factorization. Theorem. Quod erat demonstrandum. Ramanujan. Ramayana.

Topics: Exponents. Square roots. $10^2, 10^{-1}, 10^0, 10^2 \cdot 10^3 = 10^5$. Word problems with irrelevant information. Prime numbers. Factors. Prime factorization. Multiplying fractions. Dividing fractions. Converting between mixed numbers and fractions. Writing letters and emails.

Python: Know these commands. You can cut and paste this code into CodaBrainy and run it if you like, to see what it does.

```
#This is just a comment   #Output: Nothing. It just adds some words to your code.
import matplotlib.pyplot as plt    #Output: Nothing. It just allows you do do plots later.
print("Here is something  to print out.") #Output: Here is something to print out.
ages = [11, 12, 13, 15]    #Output: Nothing. It just creates a list to use later if you want.
names=["Sam", "Judy", "Faith", "Henry"] #Output: Nothing. It just creates a list to use later.
weights = [80, 100, 102, 93]    #Output: Nothing. It just creates a list to use later.
print(ages)  #Output: [12, 13, 12, 14]
print(names)  #Output: ['Sam', 'Judy', 'Faith', 'Henry']
me = 62      #Nothing.  It just creates a variable label (me) to use later if you want.
print (me)   #Output:  62
print(me/2)    #Output: 31.0  (so you can use Python as a calculator if you want)
plt.plot(ages,weights,color="red", linestyle="dotted") #Output:Nothing.It gets a graph ready.
plt.show()   #Output:  A graph showing a dotted red line of ages and weights.
```