

## DAY 1

### Humanities Class Homework:

Question: Which god or goddess is your favorite? Which one do you want to further explore?

### Math Class Homework:

Find the slopes of the following equations:

1.  $y = 5x - 10$
2.  $y = -6x + 5$
3.  $y = 100x + 200$
4.  $y = -200x - 2$

Find the zeroes of the following equations:

1.  $y = (x+4)(x+5)$ 
  - a.  $x = -4, -5$
2.  $y = (x-10)(x+2)$
3.  $y = (x-3)(x+2)$ 
  - a.  $x = 3, -2$

### Chemistry Class Homework

Question: Identify 3 types gases that cause harm to our atmosphere (eg. greenhouse gases).  
Briefly introduce one way to reduce the harmful effects caused by each of them.

## DAY 2

### Humanities Homework:

Research an interesting god / goddess story, and be prepared to tell it to the class.

### Math Homework:

Use the quadratic formula in order to solve for the zeroes of the function, or explain why they don't exist.

1.  $y = x^2 + 4x + 4$
2.  $y = 5x^2 - 20x + 1$
3.  $y = -2x^2 + 4$
4.  $y = 7x^2 - 49$

### Chemistry Homework:

Draw the Lewis Structures for two of the following molecules:

CO<sub>2</sub>, H<sub>2</sub>O<sub>2</sub>, CH<sub>4</sub>, NH<sub>3</sub>, O<sub>3</sub>, SO<sub>2</sub>

## DAY 3

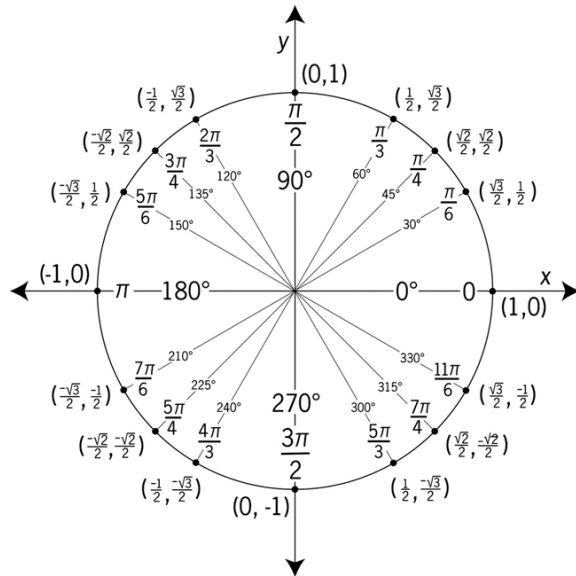
### Humanities Homework

Research about a greek city (except athens) and who their main god is

### Math Homework

Memorize the cosine and sine values for 30, 45, 60, 90, 180, 270 degrees.

Also, download the BlueJ App for Computer Science Class tomorrow.



### Chemistry Homework

Look over the key points, write a short paragraph about the points that you think you understand well and the points that still seems confusing to you.

Key points:

Atmosphere: Nitrogen / Oxygen / Argon (noble gases)

Water

Lewis Structure / covalent bonds

Ionic bonds

Polarity

IMFs

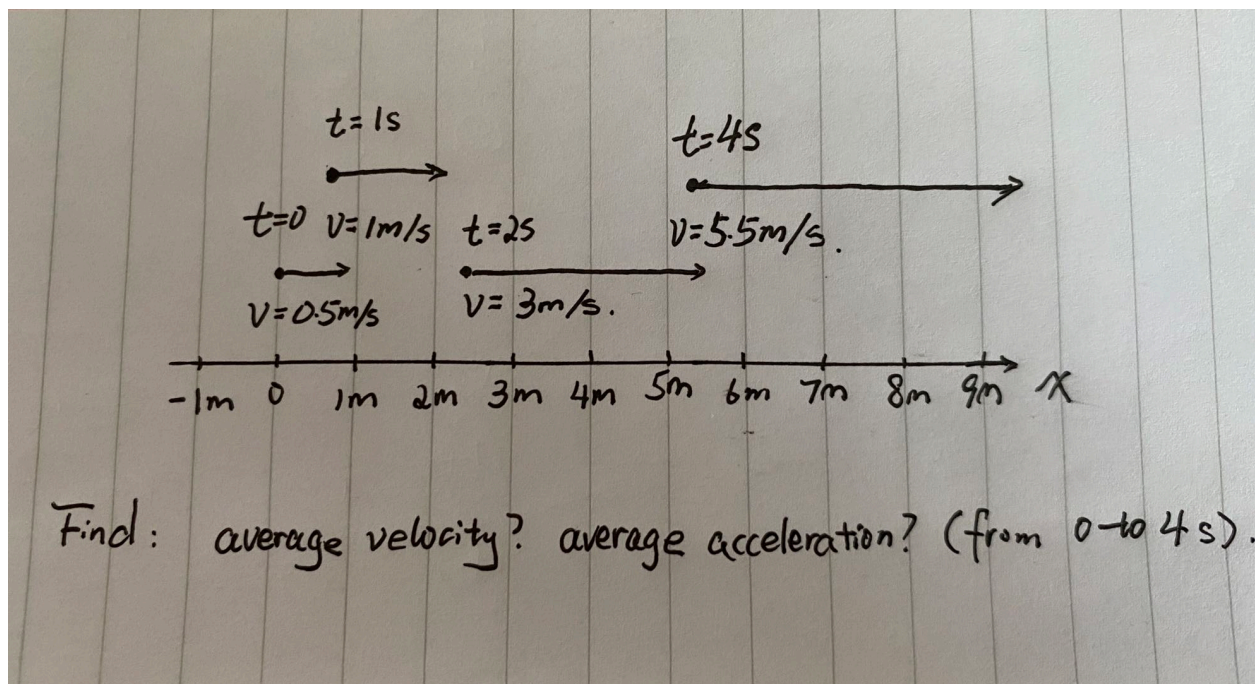
## DAY 4

### Computer Science Homework

Write the code that would explain whether or not a created number is larger, equal to, or less than 100.

### Physics Homework

Find the average velocity ( $v$ ) and average acceleration ( $a$ ) in the following motion map (from  $t=0$  to  $t=4s$ )



## **DAY 5**

### **HO HOMEWORK**

## DAY 6

### Humanities Homework:

Question: How did WW1 connect to WW2?

### Math Homework:

Simplify the expressions:

1.  $n!(n-1)! / (n-2)! n$
2.  $n(n-1)!/(n)!$
3.  $(n-2)!(n-3)! / (n-4)!(n-5)!$

### Chemistry Homework:

Choose a type of bonding, write about its main properties

## DAY 7

### Humanities Homework:

Research about a significant battle during the WWII.

### Math Homework:

1. Write the sine equation of the graph shifted 2 units to the right, 5 units up, and has a frequency of 5

$$y = 5 + \sin(5(x-2))$$

2. Write the cosine equation that has an amplitude of 10 and is shifted up 5

$$y = 10\cos(x) + 5$$

3. Write the tangent equation that has been shifted down 12 units.

$$y = \tan(x) - 12$$

### Chemistry Homework:

Research about  $\text{Fe}_3\text{O}_4$  and write a chemical equation for its composition

## DAY 8

### Math Homework:

Solve the following system of equations:

1.  $x + 2y = 8$

$$2x - 2y = 1$$

2.  $3x + 4y = 12$

$$3x - 4y = -2$$

### Chemistry Homework:

If 36 grams of  $\text{H}_2\text{O}$  is formed from a reaction in which hydrogen gas is burned in oxygen to form water. How many grams of oxygen participated in the reaction?



## DAY 9

### Humanities Homework:

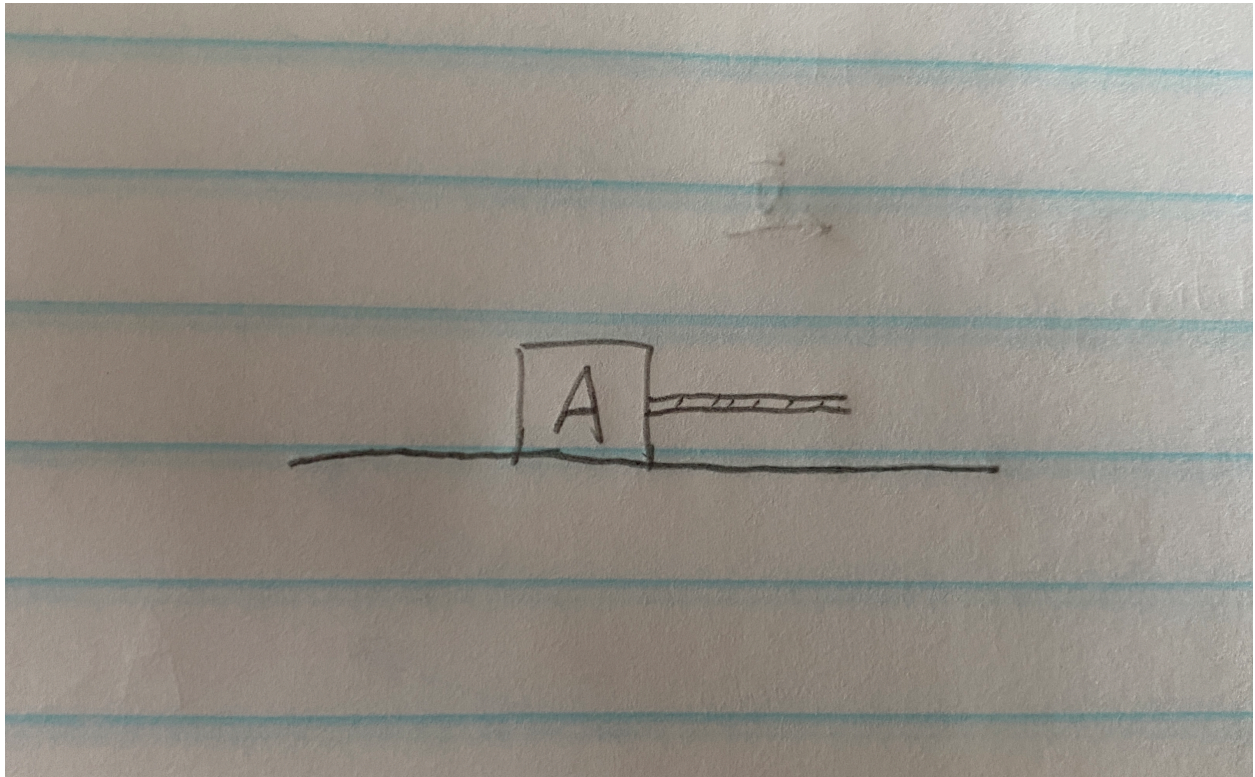
How did Germany split, and why?

### Computer Science Homework:

Write the code in order to remove all names that have the letter "j".

### Physics Homework:

Draw a free-body diagram for block A in the picture below (the rope is pulling the block to the right)



## **DAY 10**

### **Computer Science Homework**

List the similarities and differences of for loops vs foreach loops.

### **Physics Homework**

Check out the slide for key points, write a few sentences / short paragraph about which points you think you understand well and which ones you think are still confusing to you.

## DAY 11

### Humanities Homework

HW: What is your favorite post war technology?

### Math Homework

1/  $y = 2x + 11$ ,  $y = -7x + 2$

2/  $y = 3x - 5$ ,  $y = 4$

### Chemistry Homework

How many grams of water is needed to dilute 50g of 98% Sulphuric Acid ( $H_2SO_4$ ) to a solution with mass fraction of 20%?

## DAY 11

### Humanities Homework:

Homework: Come up with an example of a simple sentence and a compound sentence

### Math Homework:

1.  $y = x^2 + 1$

$$y = 3x + 3$$

2.  $y = x^2 - 7$

$$y = 2x - 2$$

### Chemistry Homework:

Identify the Acid - Base pairs in the following equations:

## **DAY 12**

**No Homework**

## **DAY 13**

### **Humanities Homework:**

HW: pg 109-110 #1-3 of powerpoint link from yesterday. (Check Email)

### **Computer Science:**

Write the code to print numbers from 1-10

### **Chemistry Homework:**

(optional) With two switches, one battery (power supply), green and red lightbulbs, and some wires, design a circuit so that when one switch is turned on, red bulb lights up, while if the other is pressed down, the green bulb lights up.