## Welcome to Math! I am so glad you are here today.

1. Put your homework on your desk
2. Solve the following system of equations using all three methods (graphing by hand, substitution, and elimination are the options!)

$$
\begin{aligned}
& y=3 x+2 \\
& y+1=2 x
\end{aligned}
$$

## Let's examine a word problem today

Bill and Jose are going to order T-shirts for their school clubs. The T-shirts will have the club logo printed on the front. Bill asks two local T-shirt companies to give him a price.

Paula's Printing charges $\$ 21.50$ for each T-shirt.
Shantay's Shirts has a one-time setup fee of $\$ 63$ and then charges $\$ 18$ for each T-shirt.


## Rebecca's Parking Pass Problem

You will receive a quiz grade for today’s work!




## Law School

Now that it's getting cold, Rebecca is thinking about driving to her evening law class instead of riding her bike. In order to drive, she will have to purchase a parking pass.

She has evening classes once a week for 2 hours.


## Easy Pay System

\$40 deposit
\$1.50 per hour used


## Night Parking Pass

$\$ 24$ per month

## Groups or 3 or 4

## Your task

1. Find the point where the Easy Pay System and the Night Parking Pass cost the same amount.
a. Use elimination, substitution, and graphing
2. What is your final recommendation for Rebecca?

You have a google slide template to complete! You can find it in Google Classroom.

## Remember...

Rebecca is in law school and may or may not remember systems of equations.
Be sure to explain it in a way that she would understand!
I will share these projects with her to help her decide what to do.

## Just the facts

- Easy Pay System - $\$ 40$ deposit, $\$ 1.50$ per hour used
- Night Parking Pass - $\$ 24$ per month
- Rebecca goes to evening classes once a week for 2 hours. (Let's assume the average month has 4 weeks)

With your group you will find the point where the cost of the Easy Pay System and the Night Parking Pass are the same. Use that to make a final recommendation to Rebecca.

This is a quiz grade.

