

## 00 Introduction – Hand this sheet back in after class

### Beginning of Class:

1. Find your team members and work with the other teams so you can sit together.
2. Introduce yourselves and exchange contact information (name/email/cell) with your group members.
3. Figure out how your group will introduce itself and its members to the class. No individual may introduce him or herself.
4. You may pick a name for your team (other than Team 1, Team 2), but the name must be short (1 word).

**Team Activities:** Get out a sheet of paper, and put your team name and team members names on the paper. Discuss, then on the paper neatly summarize your answer to your team question. We will discuss it, and **you will hand this in.**

### **Activity 1, every team does something different.**

Team 1: What does it mean to be fully present, whether this is in class, or with a friend, or simply by yourself? How can being fully present help you with your coursework and grades? How can being fully present help you with making friends and with your relationships?

Team 2: What are the characteristics of your favorite challenging classes or team activities? How did liking the class or activity influence your actions and attitude?

Team 3: What are the characteristics of a least favorite class? How did disliking this class influence your actions and attitude?

Team 4: How do you think that I (the instructor) am affected by a class I really enjoy or really dislike?

Team 5: Identify 5-10 things it is important for you to know about the class from the syllabus or that you have questions about; rank these by importance.

Team 6: What are the characteristics of a good teacher? Make a list of actions and attitudes and rank these by importance.

Team 7: What are the characteristics of a good student? Make a list of actions and attitudes and rank these by importance.

**Activity 2, every team does the same thing:** What do you already know?

1. Can you solve the linear system of equations

$$\begin{aligned}3x + 2y &= 1 \\ x + 3y &= 5\end{aligned}$$

Can you give a geometric interpretation for this problem and its solution?

2. Can you associate the above linear system with an augmented matrix?
3. What is the geometric interpretation for and what are the possible solutions for

$$\begin{aligned}a_1x + b_1y &= c_1 \\ a_2x + b_2y &= c_2\end{aligned}$$

4. Can you associate the above linear system with an augmented matrix?
5. (You do not have to solve this!) Can you give a geometric interpretation for

$$\begin{aligned}3x + 2y + 4z &= 5 \\ x - y &= 2 \\ 2x - 2y + z &= 4\end{aligned}$$

6. Can you associate the above linear system with an augmented matrix?
7. How do you solve a linear system from the augmented matrix? Do you know what you'd do to solve it?
8. Do you know how to multiply matrices? What is

$$\begin{bmatrix} 1 & -2 & 3 \\ -3 & 1 & 2 \end{bmatrix} \begin{bmatrix} 0 & 2 \\ 1 & 3 \\ -1 & 0 \end{bmatrix}$$

How about

$$\begin{bmatrix} 0 & 2 \\ 1 & 3 \\ -1 & 0 \end{bmatrix} \begin{bmatrix} 1 & -2 & 3 \\ -3 & 1 & 2 \end{bmatrix}$$

9. Can you find the determinant of

$$\begin{bmatrix} 1 & 2 \\ 3 & 4 \end{bmatrix}$$

How about

$$\begin{bmatrix} 1 & 0 & 1 \\ 2 & 3 & 0 \\ 1 & 2 & 3 \end{bmatrix}$$