1. **Answer to question 1:**

Use inline equations for simple math $1 + 1 = 2$, and centered equations for more involved or important equations

$$a^2 + b^2 = c^2. \tag{1}$$

Some people like to write scalars without boldface $x + y = 1$ and vectors or matrices in boldface

$$\boldsymbol{A}\boldsymbol{x} = \boldsymbol{b}. \tag{2}$$

An example of a matrix in LaTeX:

$$\boldsymbol{A} = \begin{pmatrix} 3 & -1 & 2 \\ 0 & 1 & 2 \\ 1 & 0 & -1 \end{pmatrix}. \tag{3}$$

With a labeled equation such as the following:

$$\frac{d^2x}{dt^2} = a \tag{4}$$

you can refer to the equation later. In equation (4) we defined acceleration.

2. **Answer to question 2**