

$$\begin{bmatrix} 1 & 0 & 0 \\ 0 & \cos\theta & -\sin\theta \\ 0 & \sin\theta & \cos\theta \end{bmatrix}$$

$$v_i'=\sum_{j=1}^n A_{ij}\cdot v_j$$

$$\sigma = \sqrt{\frac{1}{n-1} \sum_{i=1}^n (x_i - \mu)^2}$$

$$f(x)=\sqrt{x}$$

$$F=\frac{Gm_1m_2}{r^2}$$

$$d=\sqrt{(x_1-x_2)^2+(y_1-y_2)^2+(z_1-z_2)^2}$$

$$d=\sqrt{(x_1-x_2)^2+(y_1-y_2)^2}$$

$$\mathbf{F}_{ab} = -G \frac{m_a m_b}{|\mathbf{r}_{ab}|^2} \hat{\mathbf{r}}_{ab}$$

$$\hat{\mathbf{r}}_{ab} = \frac{\mathbf{r}_b - \mathbf{r}_a}{|\mathbf{r}_b - \mathbf{r}_a|}$$