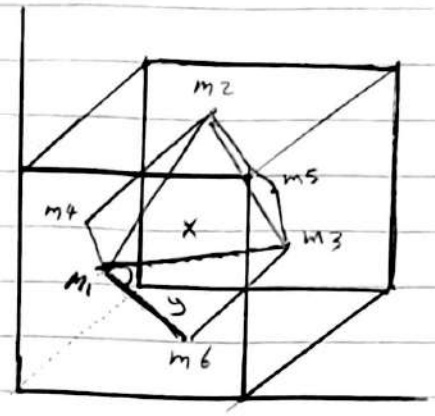
1.2.7



$m_1 = (\frac{1}{2}, \frac{1}{2}, 0)$ Front
$m_2 = (\frac{1}{2}, 1, \frac{1}{2})$ Top
$m_3 = (1, \frac{1}{2}, \frac{1}{2})$ Right
$m_4 = (0, \frac{1}{2}, \frac{1}{2})$ left
$m_5 = (\frac{1}{2}, \frac{1}{2}, 1)$ Back
$m_6 = (\frac{1}{2}, 0, \frac{1}{2})$ Buttom

$\vec{X} = \overrightarrow{m_1 m_3} = m_3 - m_1 = (1, \frac{1}{2}, \frac{1}{2}) - (\frac{1}{2}, \frac{1}{2}, 0) = (\frac{1}{2}, 0, \frac{1}{2})$

$X = |m_1 m_3| = \sqrt{(\frac{1}{2})^2 + (\frac{1}{2})^2} = \sqrt{\frac{1}{2}}$

$\vec{y} = \overrightarrow{m_1 m_6} = m_6 - m_1 = (\frac{1}{2}, 0, \frac{1}{2}) - (\frac{1}{2}, \frac{1}{2}, 0) = (0, -\frac{1}{2}, \frac{1}{2})$

$y = |m_1 m_6| = \sqrt{(-\frac{1}{2})^2 + (\frac{1}{2})^2} = \sqrt{\frac{1}{2}}$

$$\text{Angle} = \cos\theta \frac{X \cdot y}{|X||y|} = \frac{\sqrt{\frac{1}{2}}\sqrt{\frac{1}{2}}}{\frac{1}{2} \cdot \frac{1}{2}} = \frac{0.5}{0.25}$$

$\cos\theta \cdot 0.5$

$\theta = 60^\circ$