

(c) ~~8484~~ ~~f~~ ~~8484~~

$$\mu_s = \min \Rightarrow f_s = \max$$

$$\Rightarrow \boxed{f_s = \mu_s F_{12}}$$

sys = m_1 : N2 y dir :

$$F_{1, \text{floor}} = m_1 g + F_{12}$$

$$\boxed{F_{12} = F_{1, \text{floor}} - m_1 g}$$

$$F_{1, \text{floor}} = ?$$

sys = $m_1 + m_2$: N2 y dir :

$$\boxed{F_{1, \text{floor}} = (m_1 + m_2)g + F \sin \theta}$$

$$\Rightarrow F_{12} = (\cancel{m_1} + m_2)g + F \sin \theta - \cancel{m_1}g$$

$$= m_2 g + F \sin \theta$$

$$\mu_s = \frac{f_s}{F_{12}} = \cancel{m_2 g}$$

$$\boxed{\mu_s = \frac{f_s}{m_2 g + F \sin \theta}} = 0.45$$