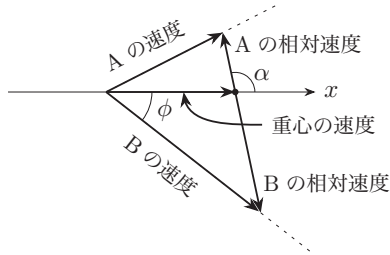


- [I] (ア) $\frac{m_1}{m_1 + m_2} v_0$ (イ) $\frac{m_2}{m_1 + m_2} v_0$ (ウ) 0
 (エ) 0 (オ) $\frac{m_1}{m_1 + m_2} v_0$ (カ) $\alpha = \pi - 2\phi$
 (キ) $\frac{2m_1 v_0}{m_1 + m_2} \cos \phi$ (ク) $\frac{4m_1 m_2}{(m_1 + m_2)^2} \cos^2 \phi$ (ケ) m_1
 (コ) $\frac{\pi}{2}$ [rad]

解答図 (I-A)



- [II] (ア) $\frac{R_1 R_2}{r}$ (イ) $\frac{1}{2} C \left(\frac{R_1 E}{r + R_1} \right)^2$ (ウ) $\frac{1}{2} L \left(\frac{E}{r + R_1} \right)^2$ (エ) $\sqrt{r^2 + (\omega L)^2}$
 (オ) $\frac{\omega L}{r}$ (カ) $\omega C_0 R_1 I_1 \cos \omega t$ (キ) $\omega C_0 R_0$ (ク) $C_0 R_1 R_2$
 [III] (ア) $\frac{4}{5} T_1$ (イ) $\frac{1}{5} p_0 S_1 \ell_1$ (ウ) $\frac{5}{6} p_0$ (エ) $\frac{7}{10} p_0 S_1 \ell_1$
 (オ) $\frac{7}{8} p_2$ (カ) $\frac{35}{16} \frac{p_2 S_2}{\ell_2}$ (キ) $\frac{7}{10} T_2$ (ク) $\frac{3}{56} p_2 S_2 \ell_2$

解答図 (III-A)

