

1.

(ア) $\frac{2mg}{k}$	(イ) $\frac{3mg}{2k}$	(ウ) $\left(L - \frac{3mg}{2k}\right)\sqrt{\frac{k}{m}}$
(エ) $\frac{\pi}{2}\sqrt{\frac{m}{k}}$	(オ) $\frac{4mg}{k}$	(カ) $\frac{\sqrt{3}}{2}mg + \frac{1}{2}mA$
(キ) $-\frac{\sqrt{3}}{6}v$	(ク) $\frac{3}{8}mv^2$	(ケ) $\pi\sqrt{\frac{3m}{k}}$

2.

(ア) $\frac{1}{2}C$	(イ) $\frac{1}{3}CV$	(ウ) $\frac{1}{3}Q$
(エ) $\frac{Q^2}{9C}$	(オ) $\frac{Q^2}{6dC}$	(カ) $\frac{1}{3}(Q + CV)$
(キ) $\frac{1}{6}CV^2$	(ク) $\frac{1}{3}CV - \frac{1}{2}Q$	(ケ) $\frac{1}{6}QV$

3.

(ア) $\frac{A+V}{A-V}$	(イ) $\frac{(A+V)B}{(B+V)A}$	(ウ) $\frac{B+V}{A+V}$
(エ) $\frac{(A+V\cos x)B}{(B+V\cos z)A}$	(オ) $\frac{B+V\cos z}{A+V\cos x}$	
(カ) $\frac{\sin y}{\sin x}$	(キ) $\frac{\sin z}{\sin x}$	