Possibly useful relations:

$\vec{A} = A_x\hat{i} + A_y\hat{j} + A_z\hat{k}$	$\lvert\vec{A}\rvert = \sqrt{A_x^2 + A_y^2 + A_z^2}$
$\cos\theta = \text{adjacent/hypotenuse}$	$\tan\theta = \sin\theta/\cos\theta$
$\sin\theta = \text{opposite/hypotenuse}$	$x = \frac{-b\pm\sqrt{b^2-4ac}}{2a}$
$\vec{v}_{\text{avg}} = \Delta\vec{r}/\Delta t$	$\vec{v}(t) = \frac{d\vec{r}}{dt}$
$\vec{a}_{\text{avg}} = \Delta\vec{v}/\Delta t$	$\vec{a}(t) = \frac{d\vec{v}}{dt}$
$\vec{v_f} = \vec{v_i} + \vec{a}t$	$v_{\text{avg}} = \frac{v_i+v_f}{2}$
$x_f = x_i + v_i t + \frac{1}{2}at^2$	$\vec{r}_f = \vec{r}_i + \vec{v}_i t + \frac{1}{2}\vec{a}t^2$
$x_f = x_i + v_{\text{avg}}t$	$v_f^2 = v_i^2 + 2a\Delta x$
$\vec{v}_{AB} = \vec{v}_{AC} + \vec{v}_{CB}$	
$\Sigma\vec{F} = m\vec{a}$	$\vec{F}_{AB} = -\vec{F}_{BA}$
$\vec{F}_g = \vec{W} = m\vec{g}$	
$f_s \leq \mu_s N$	$f_K = \mu_K N$
$F_D = \frac{1}{2}C\rho A v^2$	

You calculations will be a bit easier, if you use g=10 m/s^2 instead of 9.8 m/s^2