Kinetics of perticlen: appliction ef nuotríe $2^{\text {nd }}$ law $\vec{F}=m \vec{Q}$
 m. meas of the perticle $\vec{a}$ : aceloration \& the perticl. $\overrightarrow{m a}$ : efpective force on the paticle

$F=500 \mathrm{~N}$

$+\uparrow \sum V_{y}: \quad 500(5)-(90+110)(9.81)=(96+110) a \quad a=\square$ $\vec{a}=\square \mathrm{m} / \mathrm{s}^{2} \uparrow$
12.21


$$
\begin{aligned}
& \mu_{k}=0.1 \\
& \vec{a}_{A}=? \\
& \vec{a}_{B}=? \\
& F=?
\end{aligned}
$$

$$
\begin{aligned}
& F=\text { ? } \\
& 4 x_{A}+2 x_{B}=\curvearrowleft \quad 4 a_{A}+2 a_{B}=0
\end{aligned}
$$

$$
\begin{aligned}
& =A<\frac{96.6}{32.2} a_{A} \\
& t_{s} \Sigma V_{x}: 4 F-9.66=-\frac{96.6}{32.2} a_{A}
\end{aligned}
$$

$$
\begin{aligned}
& 6.44 \text { lb } 164.4 \mu \\
& \xrightarrow{\rightarrow} \Sigma V_{A}: 30-6.44-2 F=\frac{64.4}{32.2} a_{B} \\
& a_{A}=\square \quad a_{B}=\square \quad F=\square \\
& \vec{a}_{A}=\left(\mathrm{Bt}^{2} \rightarrow \quad \vec{a}_{B}=\square \mathrm{k} / \mathrm{k}^{2} \rightarrow \quad F=\square \mathrm{lh}\right.
\end{aligned}
$$

