

We have next system of the equations:

$$\begin{cases} v \cdot \sin \alpha \cdot t = 1.44 \\ v \cdot \cos \alpha \cdot t = 9 \\ v \cdot \sin \alpha - g \cdot t = 0 \end{cases} \Rightarrow \begin{cases} \tan \alpha = \frac{1.44}{9} \\ v \cdot \cos \alpha \cdot t = 9 \\ v \cdot \sin \alpha \cdot t = 1.44 \end{cases} \Rightarrow$$

$$\Rightarrow \begin{cases} \alpha = \arctan\left(\frac{1.44}{9}\right) = 9.1^\circ \\ v = \frac{1.44}{\sin \alpha \cdot t} = \frac{9.11}{t}; \\ \frac{1.44}{t} - 9.8 \cdot t = 0 \end{cases} \Rightarrow \begin{cases} \alpha = 9.1^\circ \\ v = \frac{9.11}{t}; \\ 1.44 - 9.8 \cdot t^2 = 0 \end{cases} \Rightarrow \begin{cases} \alpha = 9.1^\circ \\ t = 0.38 \\ v = \frac{9.11}{t} = \frac{9.11}{0.38} = 23.8 \end{cases}$$

Answer: initial speed is 23.8 m/s and angel is 9.1 degree (9.1 degree north of east).