1)

v0 = 20 m \* s-1

a)

α = 30°

d = = = **34,64101 m**

t = = = 2 s

x = = = **17,32 m**

b)

α = 60°

d = = = **34,64101 m**

t = = = 3,46408 s

x = = = **30 m**

c)

α = 45°

d = = = **40 m**

t = = = 2,8284 s

x = = = **20 m**

2)

r = 23,5 ∙ 106 m

v = 1350 m ∙ s-1

m = = = **6,4211 \* 1023**