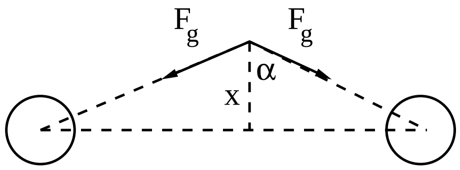
Naloga 1:
Verjetnost, da zgreši posamezen strel: $q = 0,05$.
Od sedmih strelov lahko zgreši nobenega, enega ali dva:

$$P \;=\; \binom{7}{0}(1-q)^7 + \binom{7}{1}q(1-q)^6 + \binom{7}{2}q^2(1-q)^5 = 0,698 + 0,257 + 0,034 = 0,989$$

Naloga 2:



$$\begin{aligned}
-2F_g\cos\alpha &= m\ddot{x}\\
\ddot{x} + 2\kappa\frac{M}{(d^2/4+x^2)^{3/2}}x &= 0\\
x \ll d/2\\
\ddot{x} + 2\kappa\frac{8M}{d^3} &= 0\\
\omega^2 &= \frac{16\kappa M}{d^3}
\end{aligned}$$