2.4.4 $a = 5{,}425$ m/s^2, $S_1 = 65{,}3$ N, $S_2 = 89{,}4$ N

2.4.5 $F_{S0}/F_S = (2 \cdot \cos^2 \alpha)^{-1}$

2.4.6 $F = 34{,}85$ N

2.4.7 $a = 6{,}517$ m/s^2, $S_1 = 3{,}745$ N, $S_2 = 16{,}463$ N, $a_1 = 7{,}0935$ m/s^2

2.4.8 $a = 3{,}772$ m/s^2, $F_o = 5{,}662$ N (vlak), $l = 0{,}5056$ m

2.4.9 $a = 1{,}984$ m/s^2, $s = 194{,}5$ m, $F_p = 8168$ N, $F_z = 8\ 018$ N, $F_a = 3\ 629{,}7$ N

2.4.10 $S_{CD} = 24{,}55$ N, $S_{EF} = 62{,}05$ N

2.4.11 $a = \dfrac{g \left[Q - F_g + q(2x - l) \right]}{\left[F_g + Q + ql \right]}$

$v^2 = \dfrac{2gl \left[Q - F_g \right]}{\left[F_g + Q + ql \right]}$

$F_S = F_{S1} = 2 \left(Q + qx \right) \cdot$
$\cdot \dfrac{F_g + q(l - x)}{F_g + Q + ql}$

2.4.12 $a = g \cdot \dfrac{x}{l} \cdot \sin \alpha$, $v = \sqrt{g \cdot l \cdot \sin \alpha}$

2.4.13 a) $a_A = 1{,}095$ m/s^2,
$a_B = 0{,}981$ m/s^2,
b) $a_A = a_B = 0{,}667$ m/s^2

2.4.14 $a = 0{,}366 g$

2.4.15 $a_A = 7{,}9503$ m/s^2,
$a_B = 8{,}033$ m/s^2,
$S = 24{,}95$ N

2.4.16 $a_A = 0{,}7664$ m/s^2, $S = 137{,}95$ N

2.4.17 $\omega_{min} = 2{,}557$ rad/s,
$\omega_{max} = 7{,}672$ rad/s

2.4.18 $N_A = 3\ 383$ N, $N_B = 1\ 617$ N

2.4.19 $S_1 = 1{,}39$ kN, $a = 0{,}5\sqrt{2}\,g$

2.4.20 $F_d = 273{,}9$ kN, $F_v = 45{,}03$ kN

2.4.21 $D_1 = 3{,}25$ kN $(40{,}5°)$,
$D_2 = 2{,}20$ kN $(73{,}7°)$

2.4.22 $T = 2\pi \left(1 + \dfrac{h}{\sqrt{R_0}} \right) \sqrt{\dfrac{R_0 + h}{g_0}}$

2.4.23 $h = 0{,}6076$ m

2.4.24 $s = 194{,}1$ m

2.4.25 $a_1 \approx 0{,}287$ m/s^2, $t_1 \approx 12$ s,
$v_1 \approx 5{,}46$ m/s, $t_2 \approx 137$ s,
$s_2 \approx 373$ m

2.4.26 $a_A = 1{,}741$ m/s^2,
$v_A = 1{,}18$ m/s,
$a_B = 3{,}481$ m/s^2, $v_B = 2{,}36$ m/s

2.4.27 $\mu \geq 0{,}7$

2.4.28 Najmanje 33 ophoda/min¨.

2.4.29 $s = 64{,}3$ m

2.4.30 $N = 41{,}0$ N, ne treba faktor trenja

Rad i snaga sile, energija čestice

2.5.1 $P = 220{,}725$ kW

2.5.2 $W = 8{,}72$ J

2.5.3 $v = 2{,}83$ m/s, $x_{max} = 5{,}33$ m