2.25 $t_c = 15$ s, $s_C = 225$ m

2.26 a) $v = 6$ m/s, b) $s = 46$ m,
c) $v = -9$ m/s, $s = 32{,}5$ m

2.27 $T = 20$ s, $s_{(T)} = 133{,}3$ m

2.28 $t_C = 13$ s, $s_{uk} = 94$ m, $v_{max} = 15$ m/s

2.29 $v_{max} = 2{,}36$ m/s

2.30 $a_0 = 1$ m/s^2, $v_{(7)} = 3$ m/s, $v_{(10)} = 0$,
$s_{uk} = 25{,}33$ m

2.31 $v_{(10)} = 24$ m/s, $v_{(14)} = 13$ m/s,
$s_{(10)} = 176$ m, $s_{(14)} = 261{,}33$ m

2.32 $T = 13$ s, $s_{uk} = 29$ m, $v_{(5)} = -4$ m/s,
$s_{(5)} = -3$ m

2.33 $t = 3{,}962$ s

2.34 $s = \sin t$, $a = -\sin t$, $v = \cos t$,
$t = \pi/2$ s

2.35 $v_B = 1{,}414$ m/s

2.36 $v = 2{,}5 - 2{,}5\,e^{-\frac{t}{5}}$, $a = \frac{1}{2}e^{-\frac{t}{5}}$,

$s = 2{,}5t + 12{,}5e^{-\frac{t}{5}} - 12{,}5$

2.37 $a = -20/3$ m/s^2, $s = 20 - 0{,}5e^{-\frac{2}{3}(6{,}142-t)}$

2.38 $a_{(s=2)} = 150$ mm/s^2

2.39 $K = 4{,}185 \cdot 10^{-3}$ m^{-1}, $t = 23{,}3$ s

2.40 $k = 562{,}5 \cdot 10^3$ mm^3/s^2,
$s_{(3)} = 357{,}2$ mm,
$v_{(3)} = 39{,}69$ mm/s

2.41 $s_0 = 0{,}03163$ m, $a_0 = -7{,}905$ m/s^2,
$s = 0{,}03163\sin 15{,}81t$,
$v = 0{,}5\cos 15{,}81t$,
$a = -7{,}905\sin 15{,}81t$

2.42 $\varphi_0 = 1{,}09974$ rad, $v_0 = 4{,}409$ m/s,
$s_0 = 0{,}2807$ m

3 Krivocrtno gibanje čestice

3.1 a) $v_{(0)} = 2{,}83$ m/s, $v_{(1)} = 4{,}008$ m/s,
$a_{(0)} = 6{,}325$ m/s^2, $a_{(1)} = 2{,}03$ m/s^2
b) $y = x^{-1}$,
c) $\rho_{(0)} = 1{,}414$ m, $\rho_{(1)} = 32{,}188$ m

3.2 $\rho = 4{,}5$ m

3.3 $v_x = 1{,}265$ m/s, $v_y = 3{,}795$ m/s,
$\rho = 5{,}27$ m

3.4 $v_0 = 21{,}3$ m/s uz $\alpha = 56{,}15°$

3.5 $t = 0{,}2$ s, $x = 0{,}04$ m, $y = 1{,}02$ m,
$v_x = 0{,}2$ m/s, $v_y = 0{,}2$ m/s,
$a_x = 0$, $a_y = 1$ m/s^2

3.6 $v_0 = 24{,}26$ m/s, $l = 17{,}32$ m,
$t = 1{,}428$ s

3.7 $v_x = 0{,}485$ m/s, $v_y = 1{,}94$ m/s,
$\vec{a}_n \perp \vec{v}$, $a_t = 0$, $a_x = -0{,}221$ m/s^2,
$a_y = 0{,}0551$ m/s^2

3.8 čestice treba izbaciti istodobno,
$v_{min} = 12{,}86$ m/s, $t = 2{,}62$ s

3.9 $x_B = 30$ m, $y_B = 32{,}3415$ m,
$v = 16{,}293$ m/s, $\rho = 29{,}39$ m
$v_x = 15$ m/s, $v_y = 6{,}36$ m/s,
$a_t = -3{,}829$ m/s^2, $a_n = 9{,}031$ m/s^2,

3.10 $v_x = 2$ m/s, $v_y = 0$, $a_x = 0$,
$a_y = -2$ m/s^2, $\rho = 2$ m, kružnica