

## Kapittel ??

?? a)  $y = Ct - \frac{1}{2}gt^2 + D$  b)  $y = v_0 - \frac{1}{2}gt^2$ .

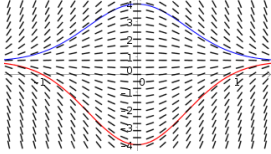
?? Se løsningsforslag.

?? a)  $Ce^{-4x} + 2$  b)  $y = x^{-1}(C + \cos x) + \sin x$  c)  $y = Cx^{-3} + \frac{6x^2}{5} + \frac{x}{2}$  d)

$y = Ce^{-x^3} + e^x$

?? a)  $y = Ce^{\frac{1}{2}e^x(\sin x + \cos x)}$  b)  $y = \pm \sqrt{Ce^{2x^3} - 1}$

?? a)  $y = xe^{x^2-1}$  b)  $y = -\operatorname{atan}(1 - \sqrt{x})$



?? a) b)  $y' = 0$  c)  $y' = 0$  d)  $y'(-3, 5) = 51, y'(2, 4) = 20$

?? a)  $y = Ce^{-x} + De^{2x}$  b)  $y = (C + Dx)e^{3x}$  c)  $y = e^{2x}(C \cos(3x) + D \sin(3x))$

?? a)  $y = -\frac{1}{8}(e^{5x} + 7e^{-3x})$  b)  $y = 2e^{-5x} + 11xe^{-5x}$  c)  $y = e^x \cos(2x)$

?? a)  $y' = ky, k > 0$  b)  $y = 100 \cdot 1.01^t$

?? a)  $T = T_a + Ce^{-kt}$  b)  $T = 15 + 80e^{-\frac{\ln 2}{5}t}$  c)  $T(15) = 25$  d) Temperaturen til gjenstanden går mot romtemperaturen.

?? Se løsningsforslag.

?? a)  $y = 2 \cos(5t)$  b)  $\frac{2\pi}{5}$  c)  $e^{-3x} \sin(4t)$