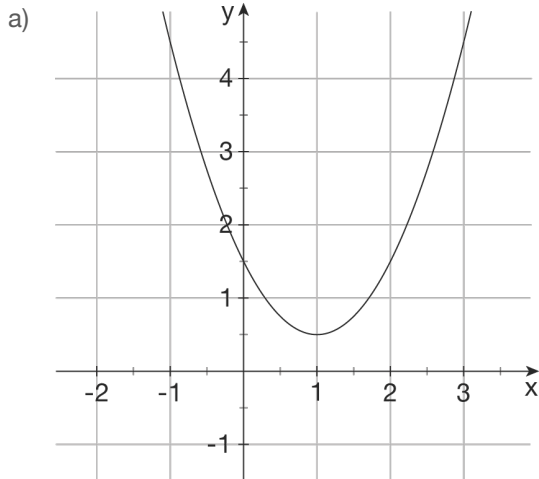
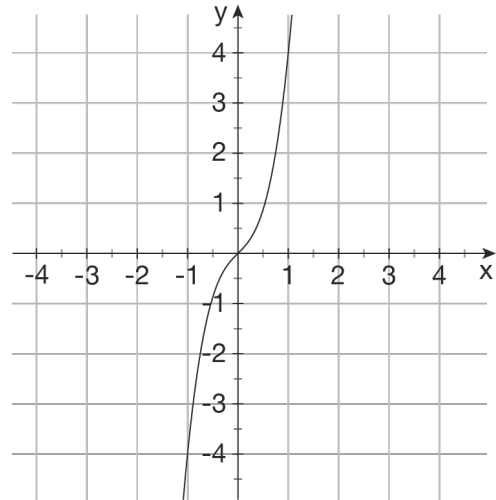


## Vermischte Aufgaben

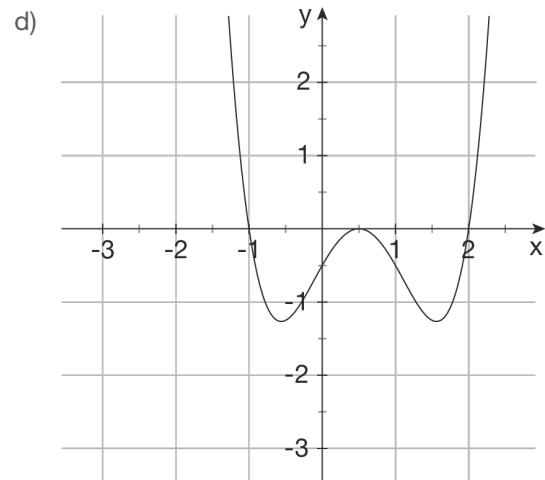
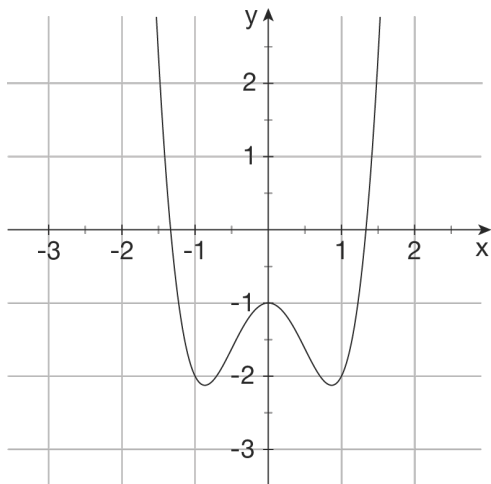
1. Gegeben sind die Schaubilder einiger ganzrationaler Funktionen. Bestimme einen möglichen Funktionsterm.



b) Hinweis:  $f\left(\frac{1}{2}\right) = \frac{7}{8}$

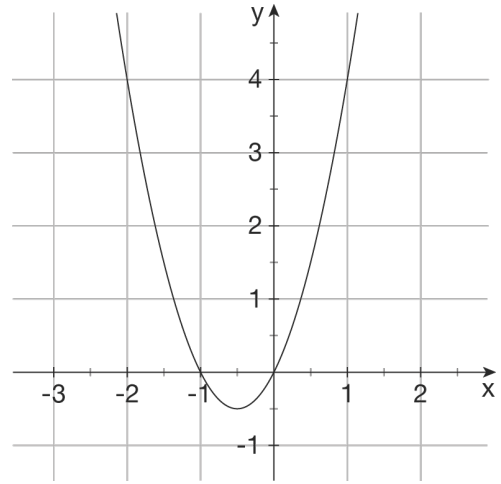
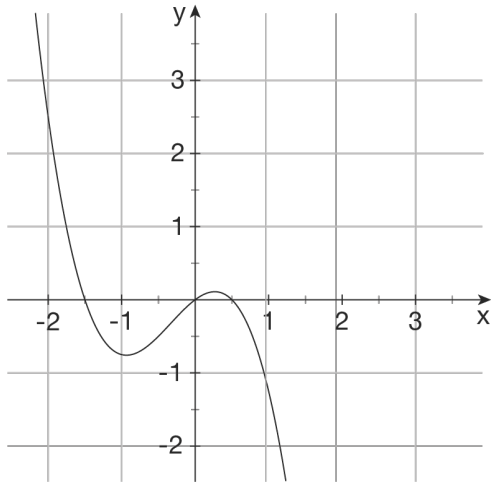


c) Hinweis:  $f\left(\frac{1}{2}\right) = -\frac{13}{8}$

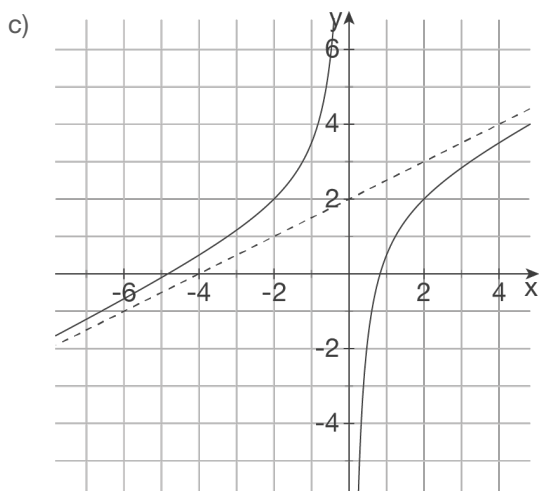
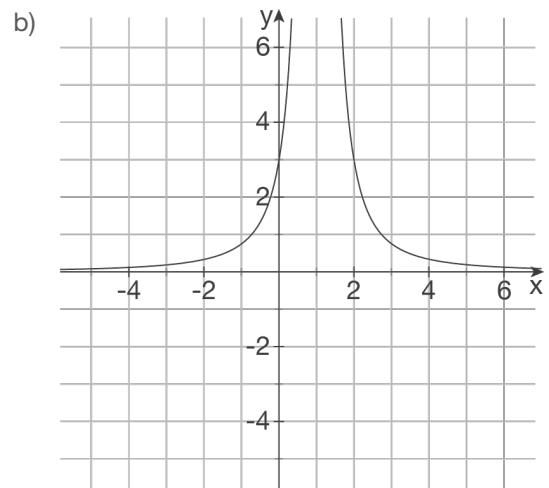
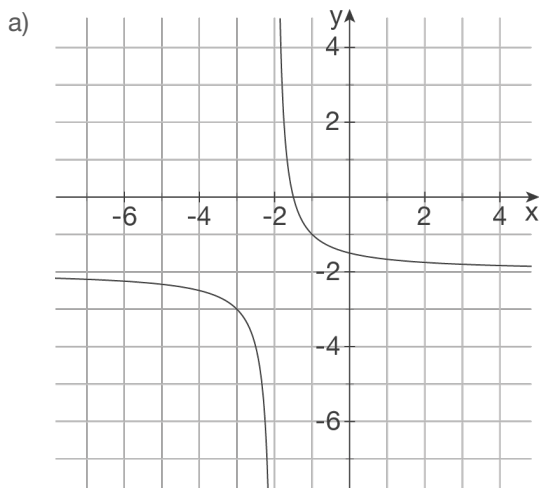


e)

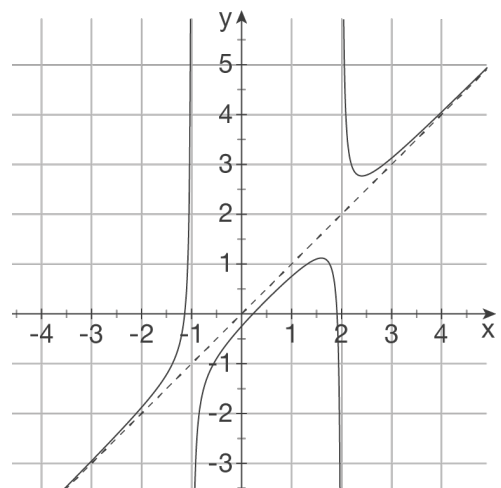
f)

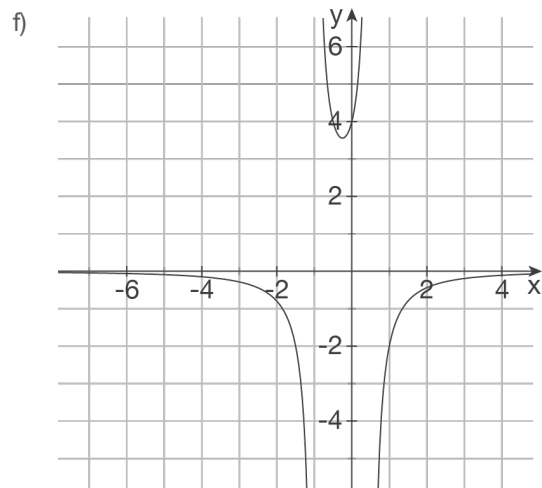
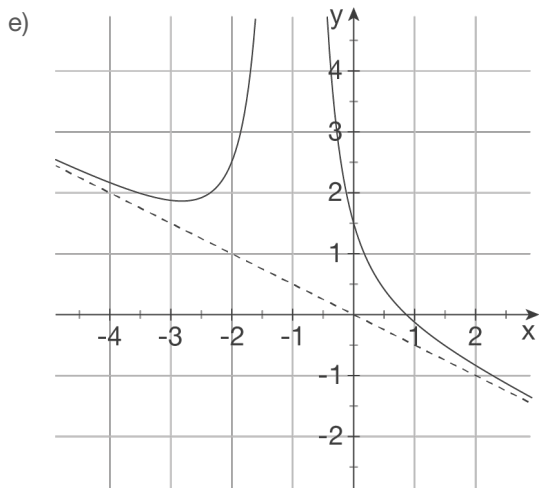


2. Gegeben sind die Schaubilder einiger gebrochenrationaler Funktionen. Bestimme einen möglichen Funktionsterm.



d) Hinweis:  $f(0) = -\frac{1}{4}$





3. Ordne jedem Funktionsterm ein Schaubild zu und begründe deine Entscheidung.

a)  $f(x) = x \cdot e^{(x^2)}$

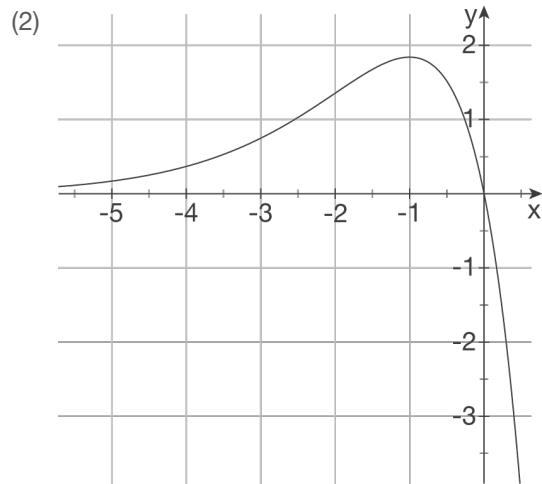
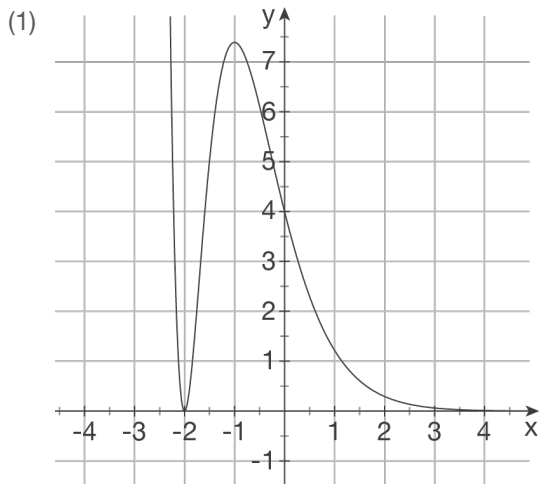
b)  $f(x) = (x - 1) \cdot e^x$

c)  $f(x) = 2 \cdot e^{-x} - x$

d)  $f(x) = 5x \cdot e^{-(x+1)}$

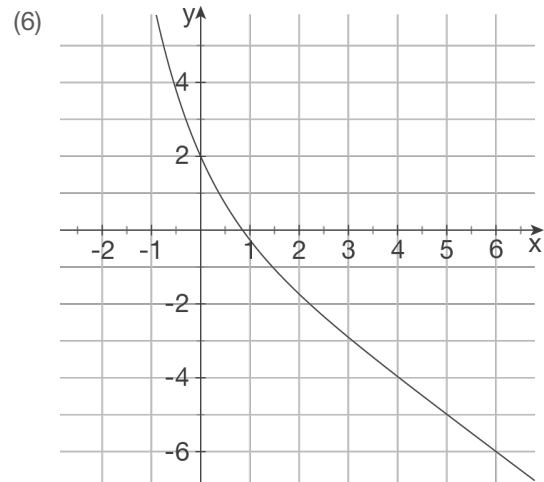
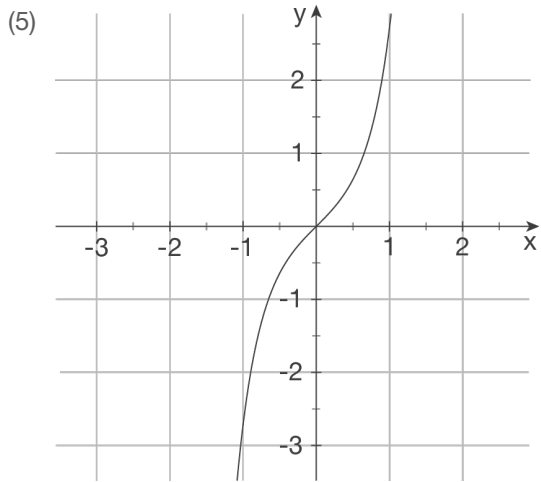
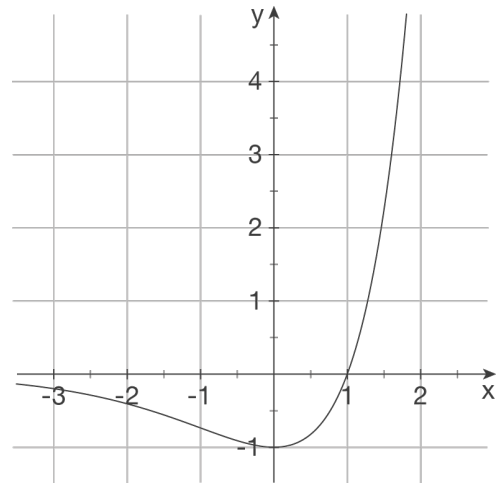
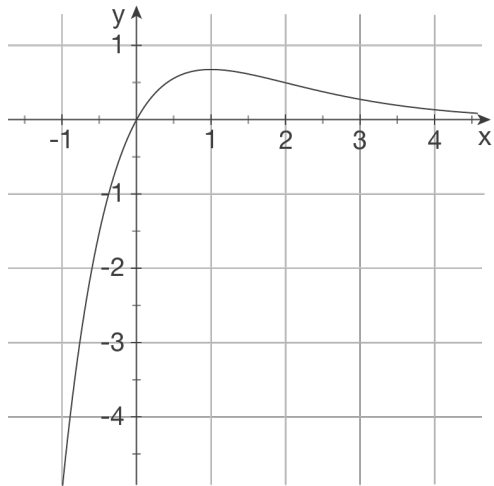
e)  $f(x) = -5x \cdot e^x$

f)  $f(x) = (x + 2)^2 \cdot e^{-2x}$



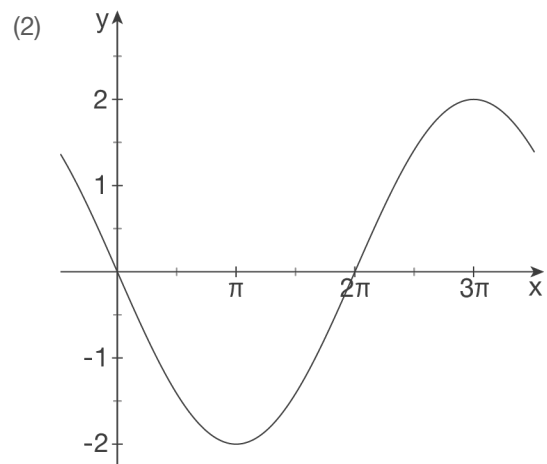
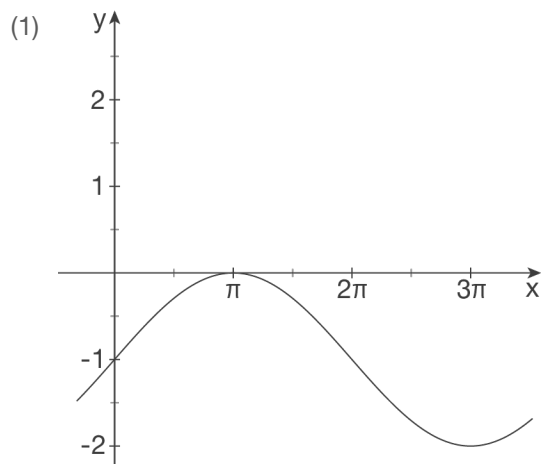
(3)

(4)

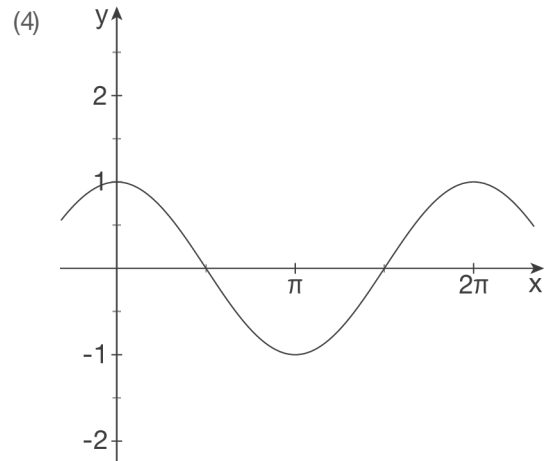
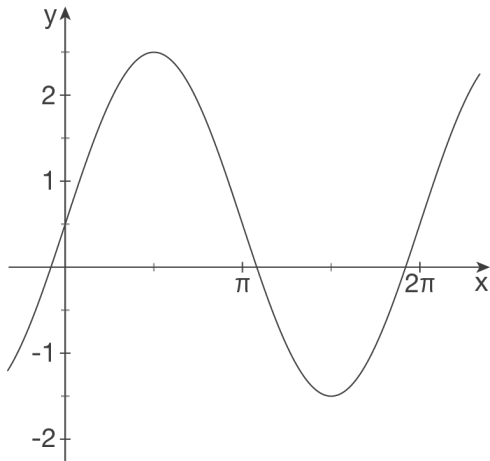


4. Gegeben sind die Schaubilder einiger trigonometrischer Funktionen.

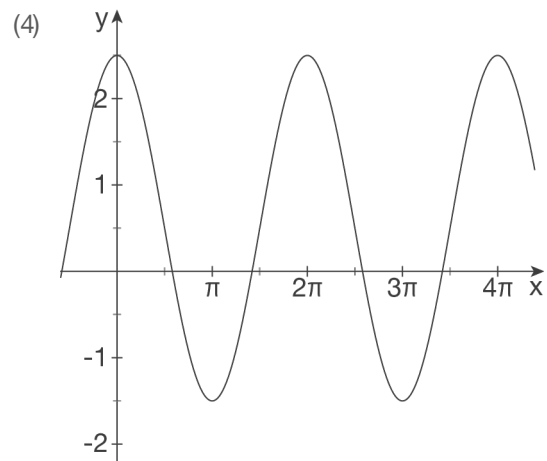
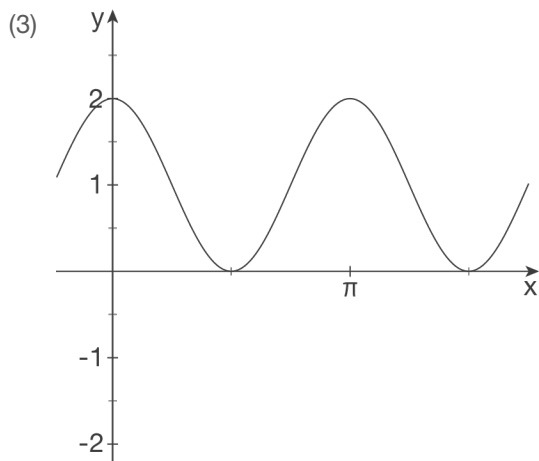
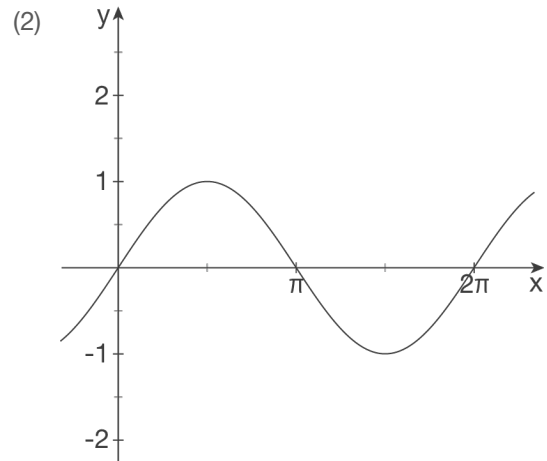
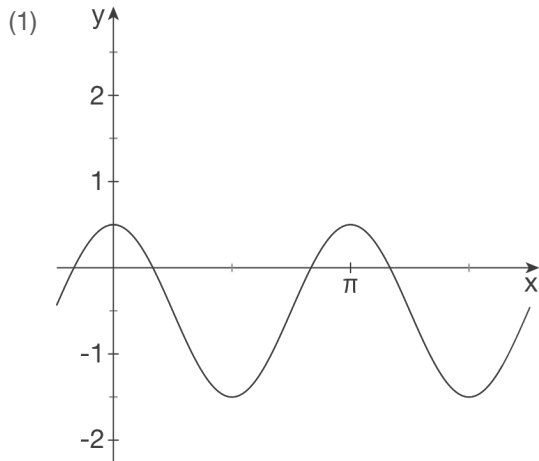
a) Interpretiere folgende Schaubilder als Sinuskurven und bestimme einen möglichen Funktionsterm.



(3)



b) Interpretiere folgende Schaubilder als Cosinuskurven und bestimme einen möglichen Funktionsterm.



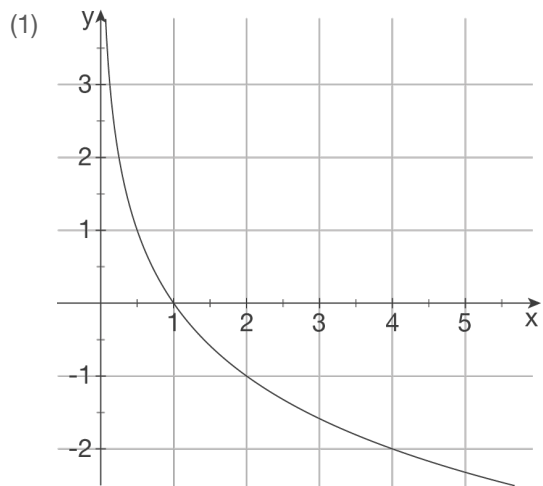
5. Ordne jedem Funktionsterm ein Schaubild zu und begründe deine Entscheidung.

a)  $f(x) = x \cdot \ln(x)$

b)  $f(x) = \log_{\frac{1}{2}} x$



c)  $f(x) = \ln(x + 2)$



d)  $f(x) = \ln(3x)$

