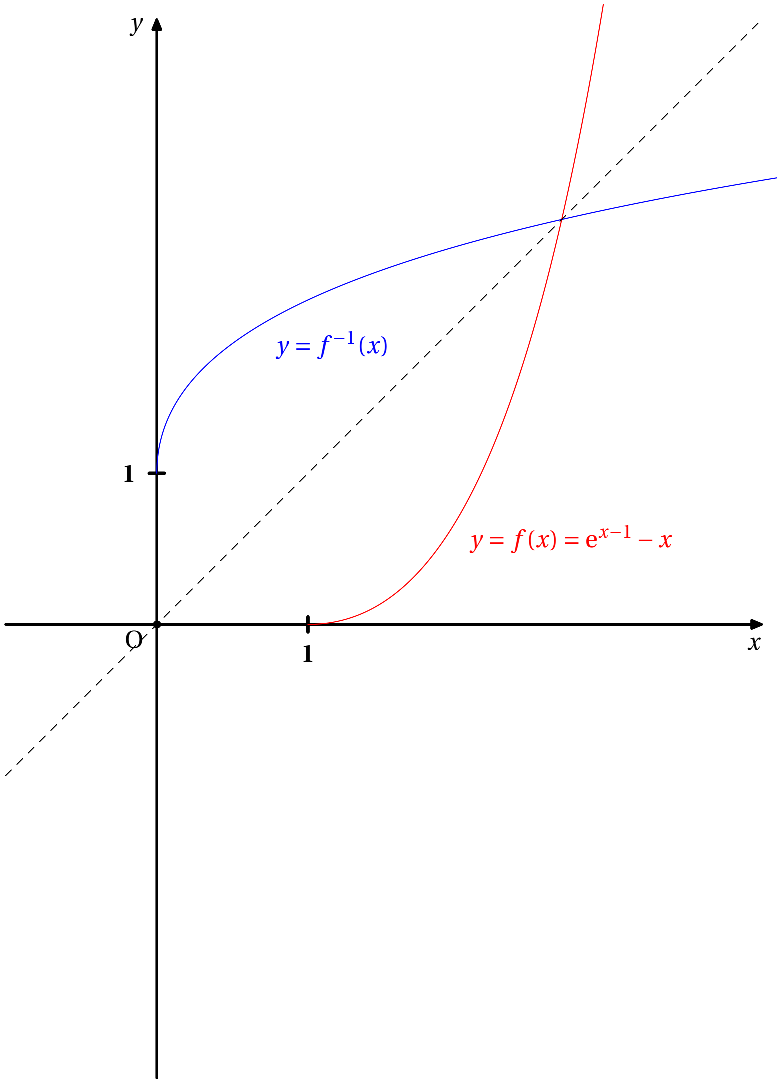
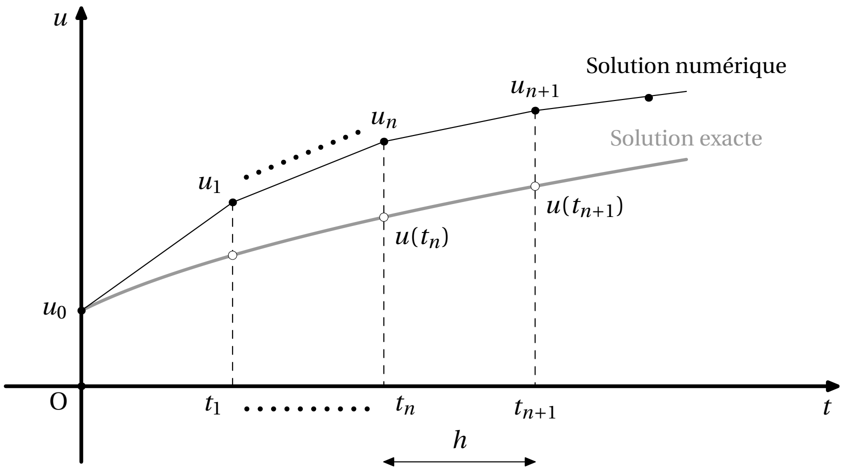
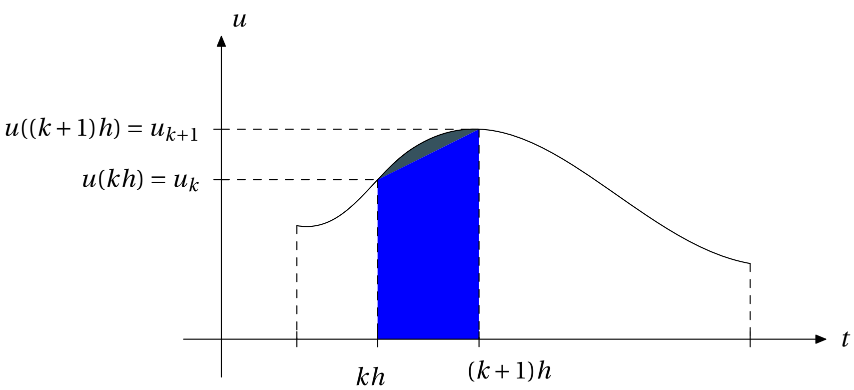


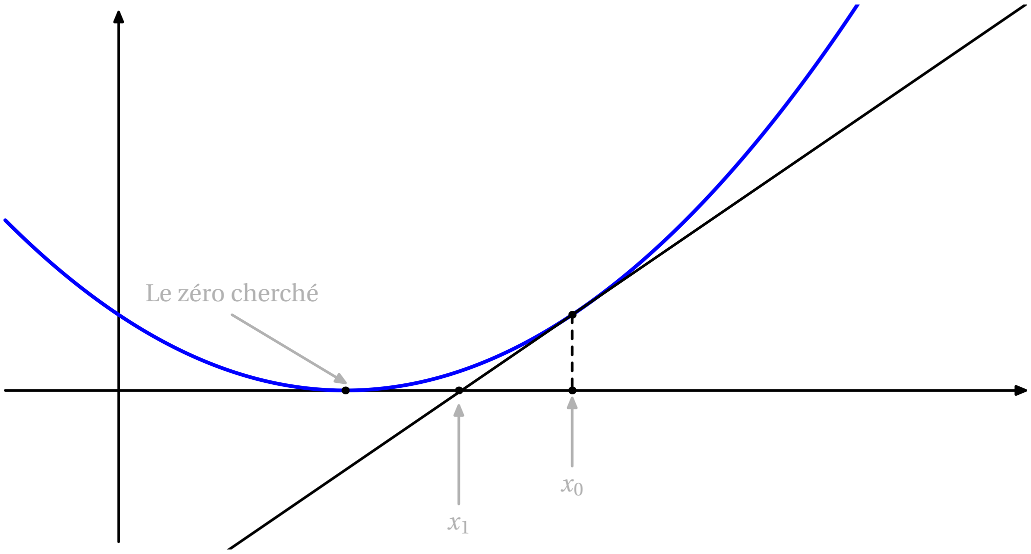
y
x
O
1
1
$y = f^{-1}(x)$
$y = f(x) = \mathrm{e}^{x-1} - x$

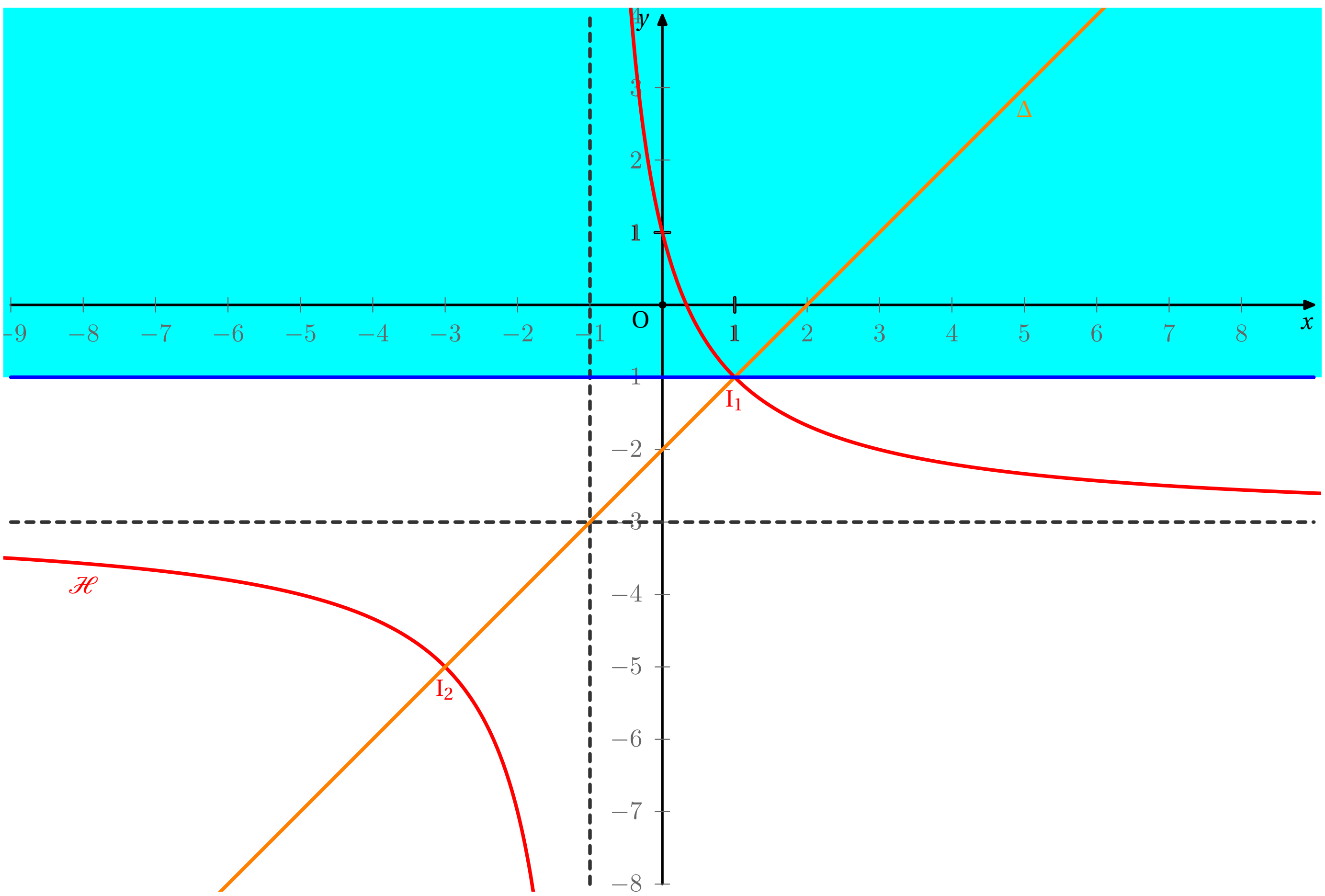


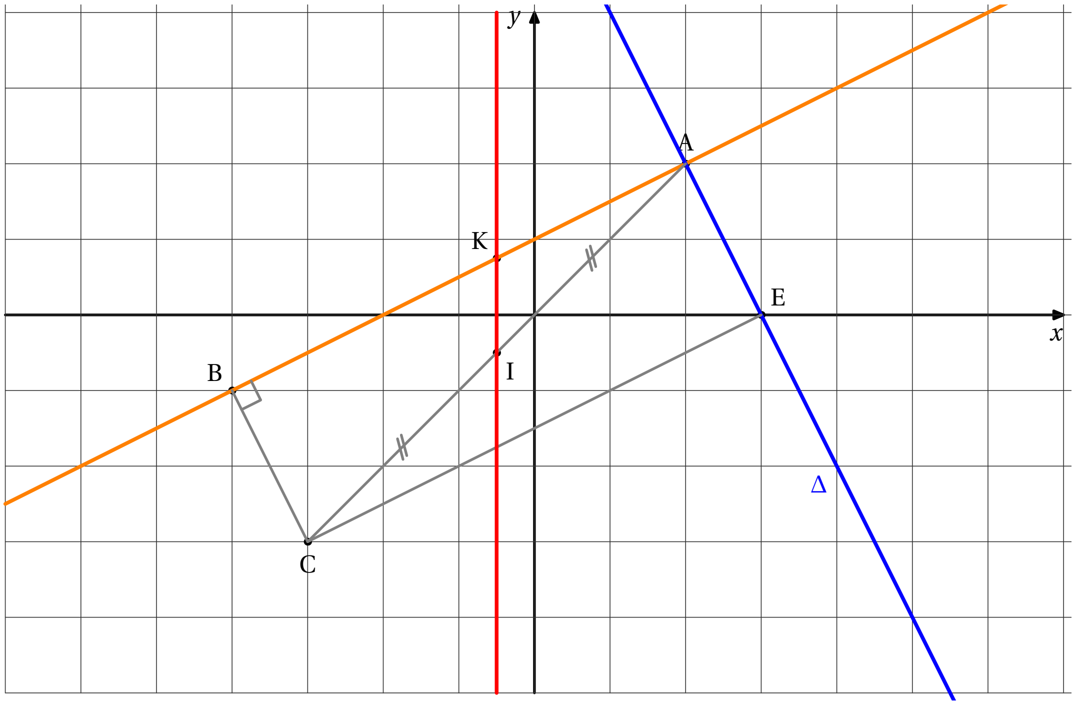
u
Solution numérique
Solution exacte
u_{n+1}
u_n
u_1
u_0
$u(t_n)$
$u(t_{n+1})$
O
t_1
t_n
t_{n+1}
t
h

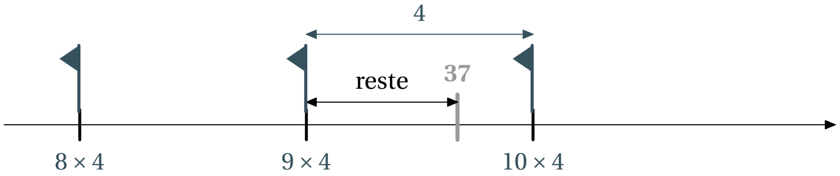


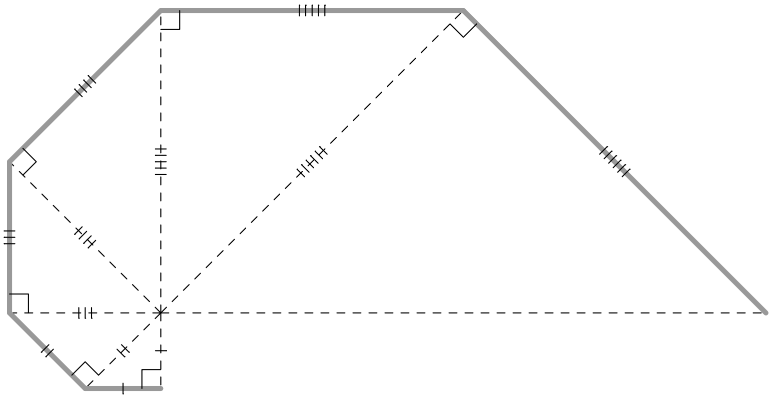
u
$u((k+1)h) = u_{k+1}$
$u(kh) = u_k$
t
kh
$(k+1)h$

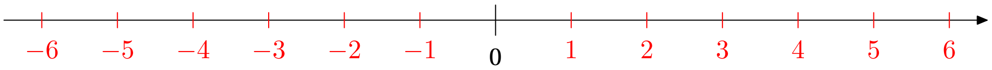

Le zéro cherché
x_1
x_0

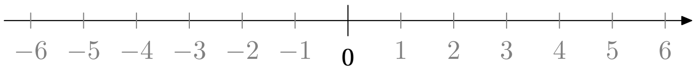

y
Δ
O
x
I_1
I_2
$\mathscr{H}$



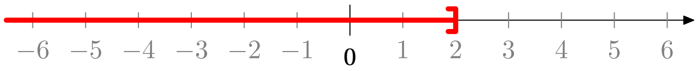




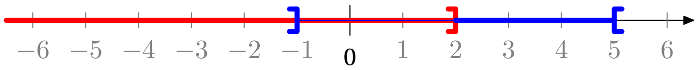




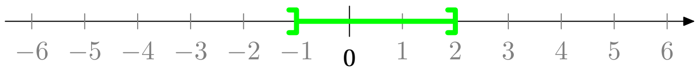
$I =]-\infty\,;2]$



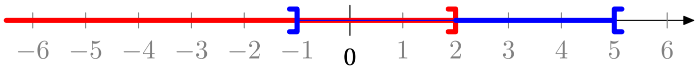
$I =]-\infty\,;2]$ $J =]-1\,;5[$



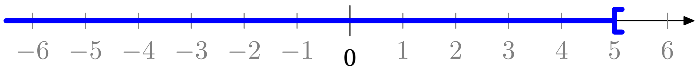
$I \cap J =]-1\,;2]$



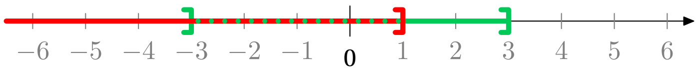
$I =]-\infty\,;2]$ $J =]-1\,;5[$



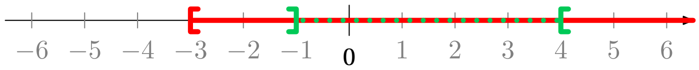
$I \cup J =]-\infty\,;5[$

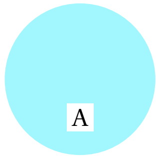


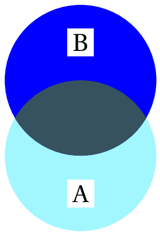
$J =]-\infty\,;1]$ $I =]-3\,;3]$

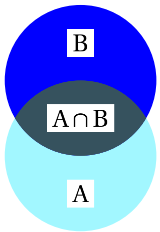


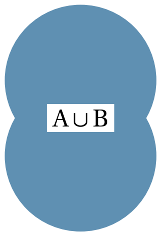
$I =]-1\,;4[$ $J = [-3\,;+\infty[$

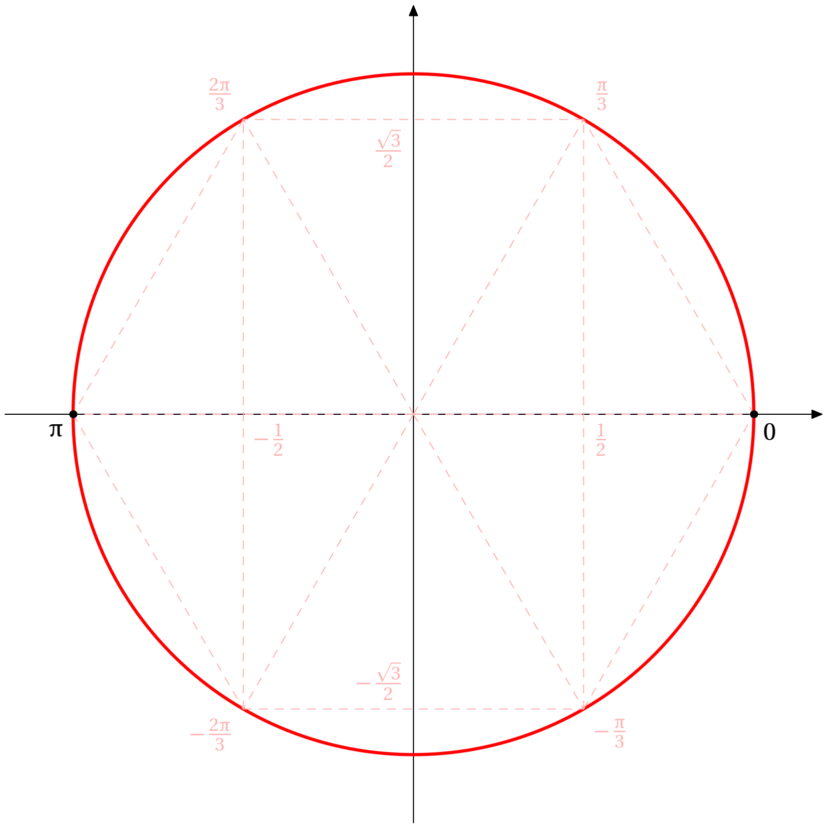


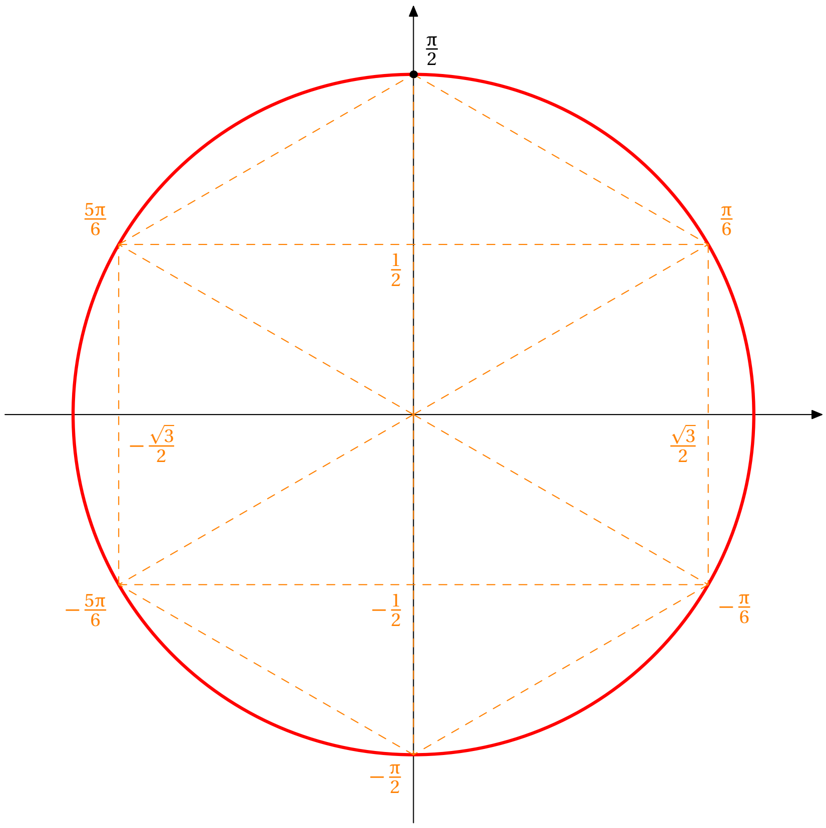


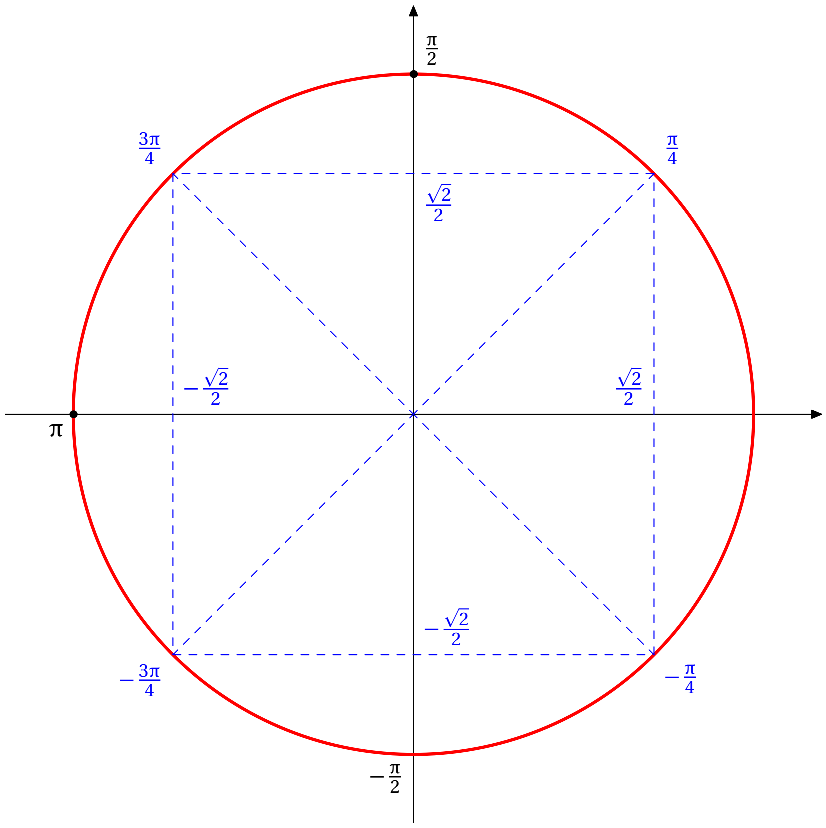


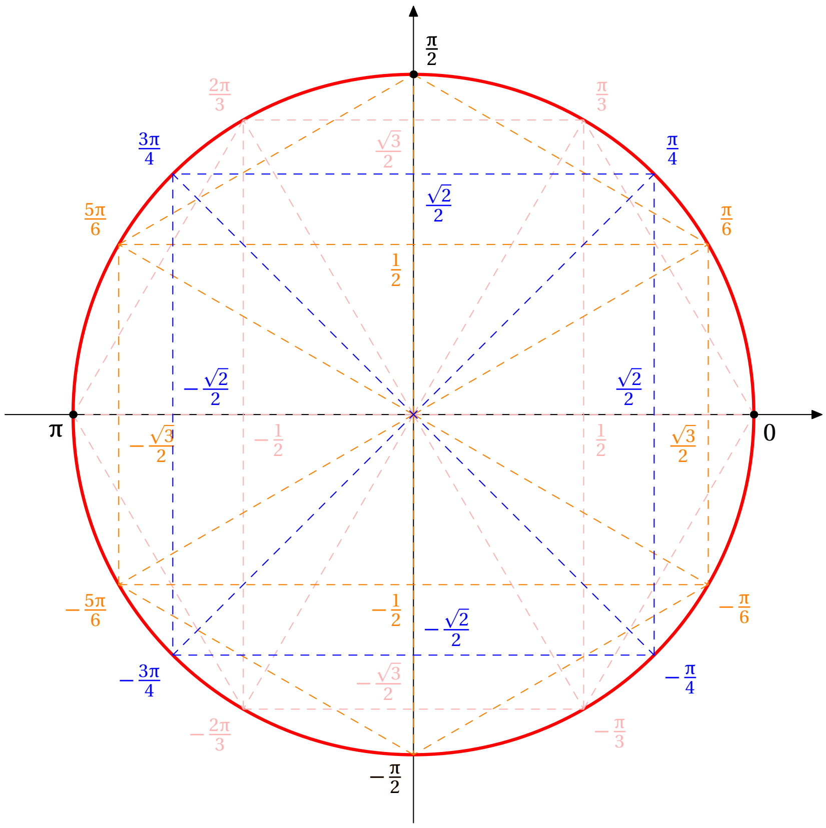


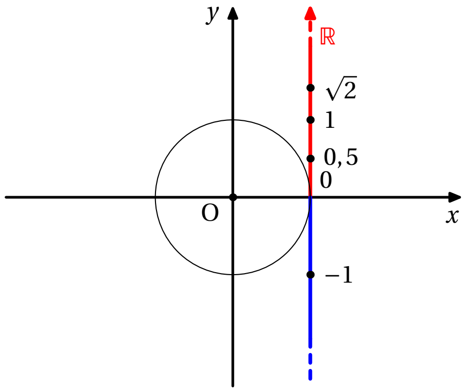


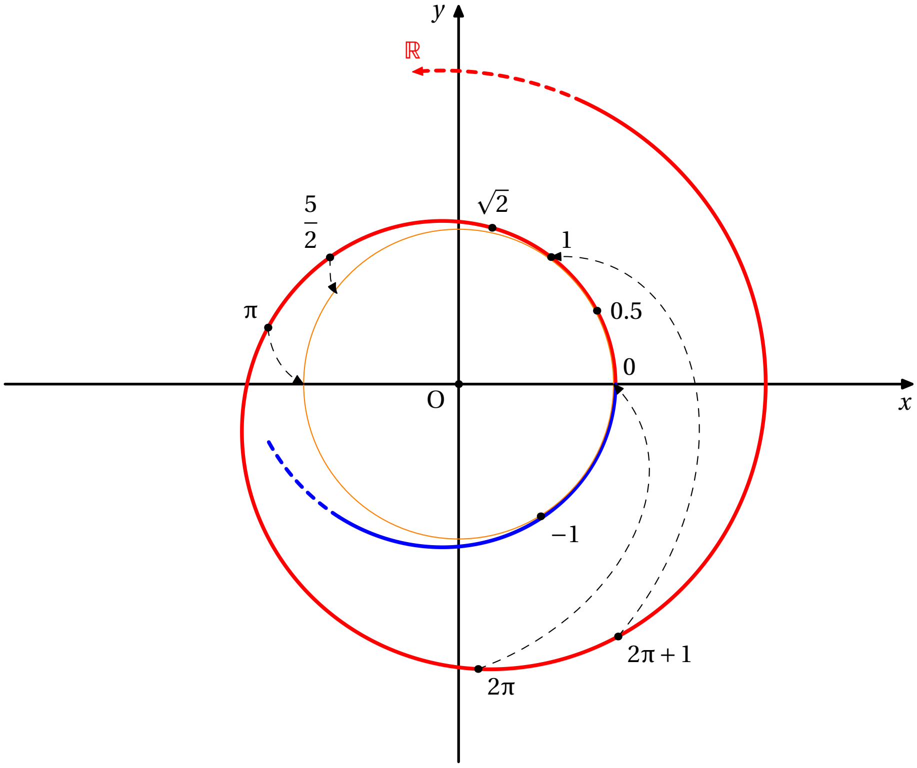

2π/3
π/3
√3/2
π
−1/2
1/2
0
−√3/2
−2π/3
−π/3

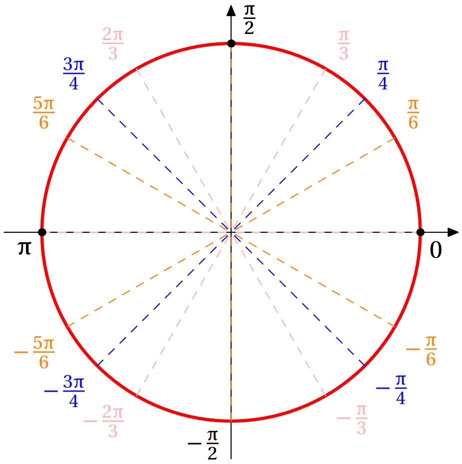

π/2
5π/6
π/6
1/2
−√3/2
√3/2
−5π/6
−1/2
−π/6
−π/2

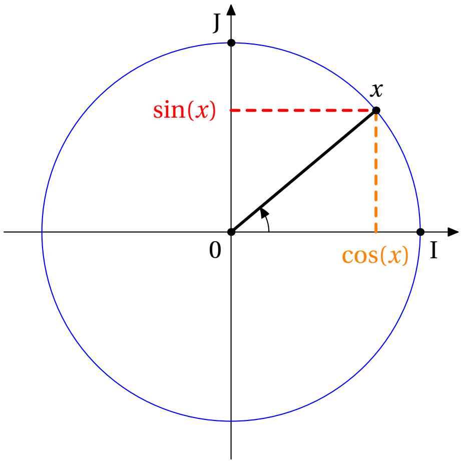

$\frac{\pi}{2}$
$\frac{3\pi}{4}$
$\frac{\pi}{4}$
$\frac{\sqrt{2}}{2}$
$-\frac{\sqrt{2}}{2}$
$\frac{\sqrt{2}}{2}$
π
$-\frac{\sqrt{2}}{2}$
$-\frac{3\pi}{4}$
$-\frac{\pi}{4}$
$-\frac{\pi}{2}$

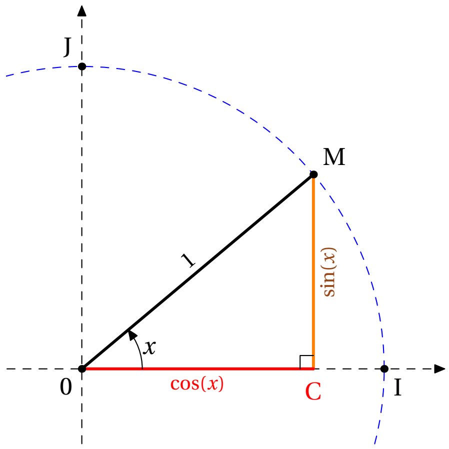

$\frac{\pi}{2}$
$\frac{2\pi}{3}$
$\frac{\pi}{3}$
$\frac{3\pi}{4}$
$\frac{\sqrt{3}}{2}$
$\frac{\pi}{4}$
$\frac{\sqrt{2}}{2}$
$\frac{5\pi}{6}$
$\frac{\pi}{6}$
$\frac{1}{2}$
$-\frac{\sqrt{2}}{2}$
$\frac{\sqrt{2}}{2}$
π
0
$-\frac{\sqrt{3}}{2}$
$-\frac{1}{2}$
$\frac{1}{2}$
$\frac{\sqrt{3}}{2}$
$-\frac{5\pi}{6}$
$-\frac{1}{2}$
$-\frac{\sqrt{2}}{2}$
$-\frac{\pi}{6}$
$-\frac{3\pi}{4}$
$-\frac{\pi}{4}$
$-\frac{\sqrt{3}}{2}$
$-\frac{2\pi}{3}$
$-\frac{\pi}{3}$
$-\frac{\pi}{2}$

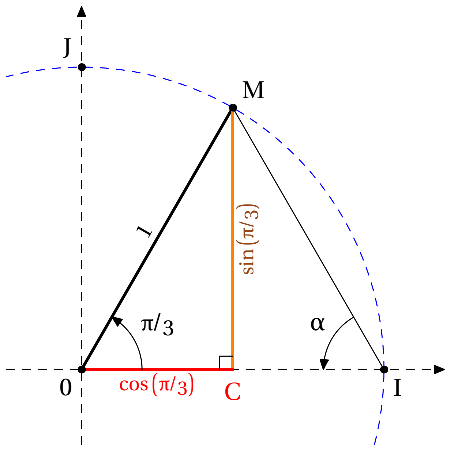

y
x
O
ℝ
$\sqrt{2}$
1
0, 5
0
−1

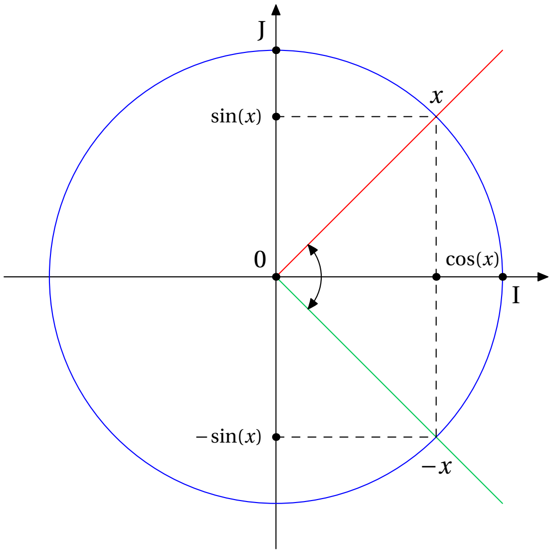

y
x
O
ℝ
$\frac{5}{2}$
$\sqrt{2}$
1
0.5
0
π
−1
2π + 1
2π

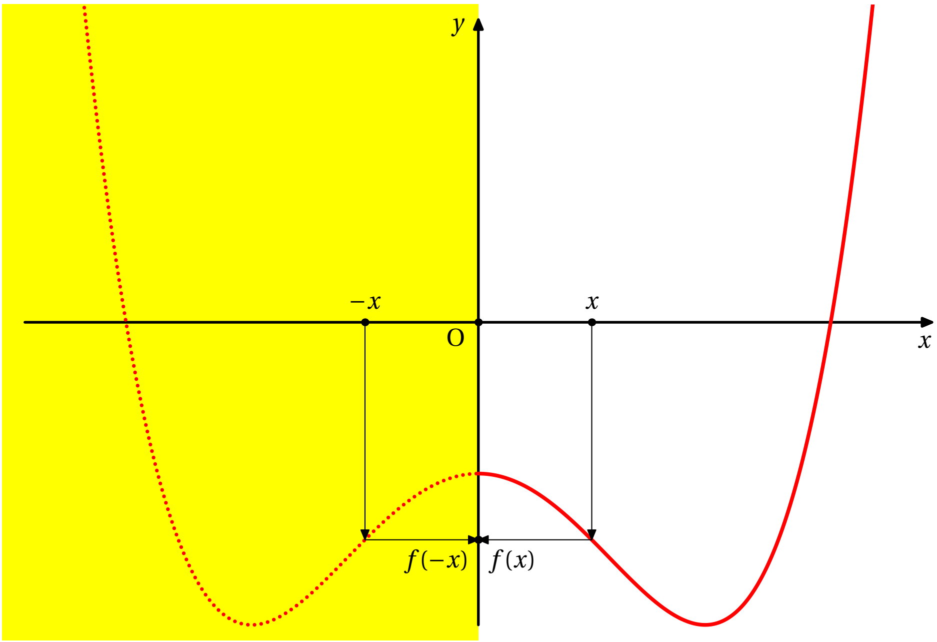

$\frac{\pi}{2}$
$\frac{2\pi}{3}$
$\frac{\pi}{3}$
$\frac{3\pi}{4}$
$\frac{\pi}{4}$
$\frac{5\pi}{6}$
$\frac{\pi}{6}$
π
0
$-\frac{5\pi}{6}$
$-\frac{\pi}{6}$
$-\frac{3\pi}{4}$
$-\frac{\pi}{4}$
$-\frac{2\pi}{3}$
$-\frac{\pi}{3}$
$-\frac{\pi}{2}$


J
x
$\sin(x)$
0
$\cos(x)$
I

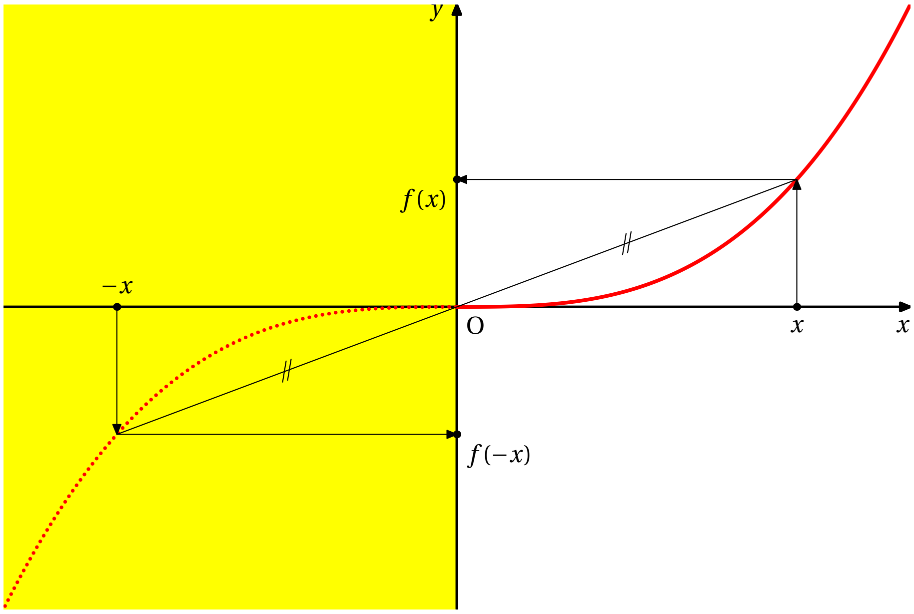

J
M
1
$\sin(x)$
x
0
$\cos(x)$
C
I


J
M
1
$\sin(\pi/3)$
$\pi/3$
α
0
$\cos(\pi/3)$
C
I

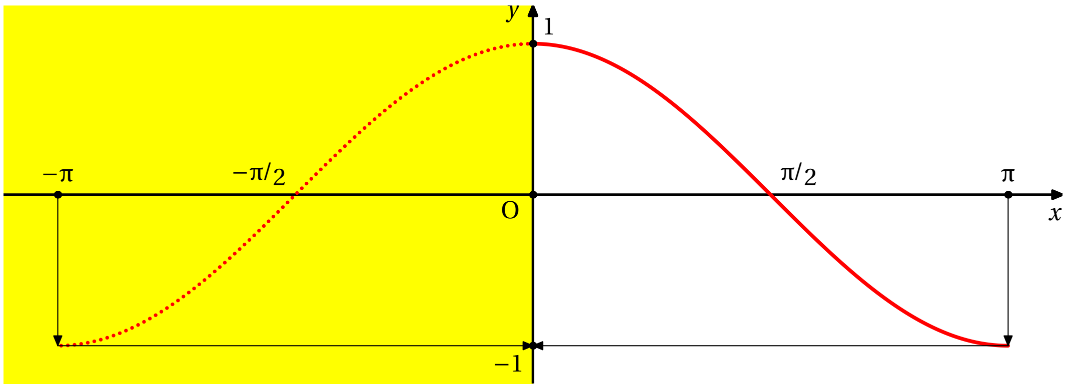

J
x
$\sin(x)$
0
$\cos(x)$
I
$-\sin(x)$
$-x$



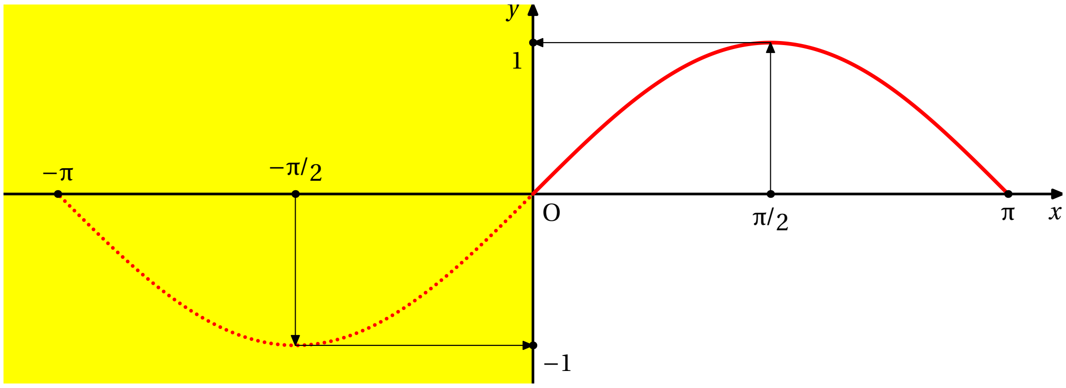
y
−x
x
O
x
f(−x)
f(x)



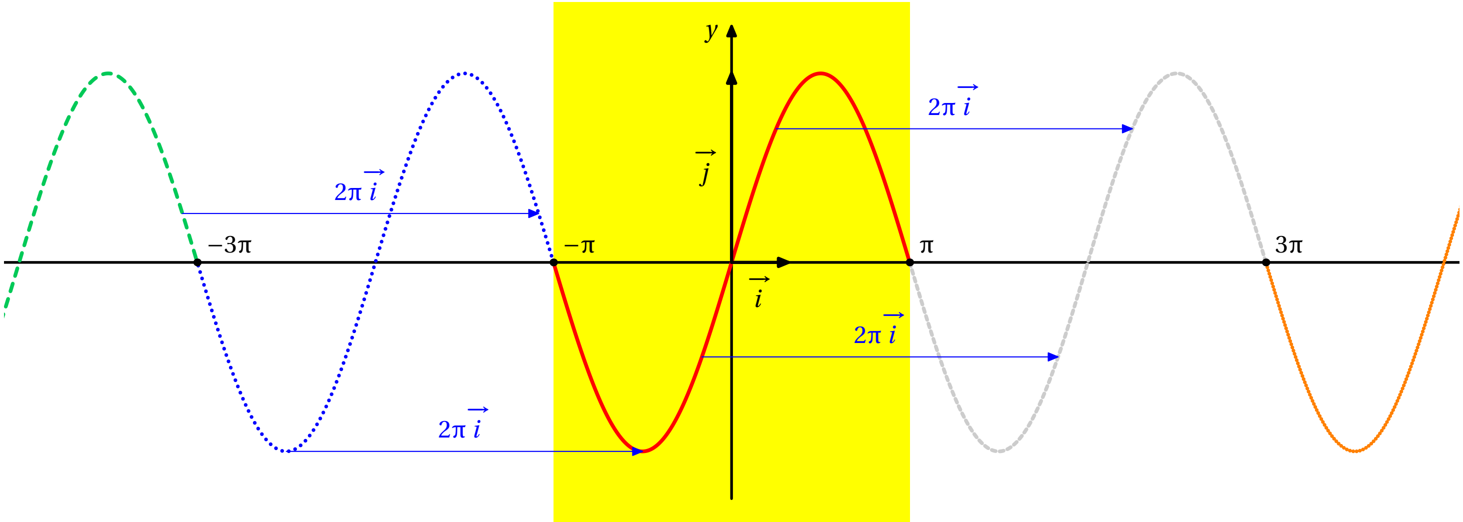
y
f(x)
−x
O
x
x
f(−x)



y
1
−π
−π/2
π/2
π
O
x
−1



y
1
−π
−π/2
O
π/2
π
x
−1



y
2π $\vec{i}$
$\vec{j}$
2π $\vec{i}$
−3π
−π
π
3π
$\vec{i}$
2π $\vec{i}$
2π $\vec{i}$