

Nye smarte plotfunktioner

"shadebetween"

God til at farvelægge et område mellem 2 funktioner.

Funktionen ligger i plots-pakken.

Eksempler:

restart

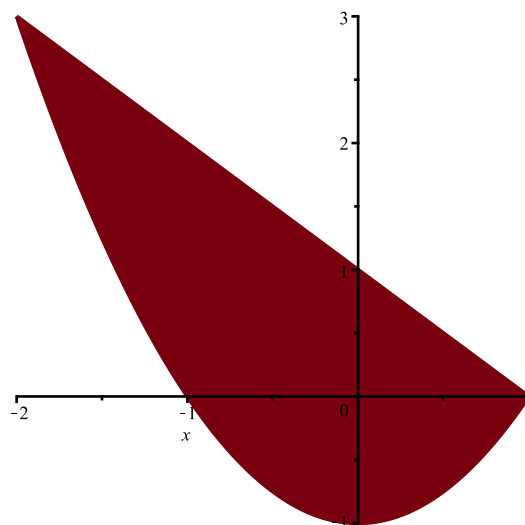
with(plots) :

$f(x) := x^2 - 1 :$

$g(x) := -x + 1 :$

$\text{solve}(f(x) = g(x), x) = 1, -2$

$\text{shadebetween}(f(x), g(x), x = -2 .. 1)$



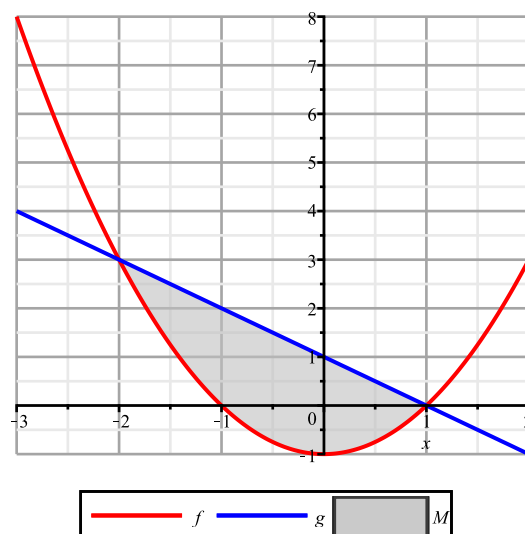
Bedre tegning:

$F := \text{plot}(f(x), x = -3 .. 2, \text{color} = \text{red}, \text{legend} = f) :$

$G := \text{plot}(g(x), x = -3 .. 2, \text{color} = \text{blue}, \text{legend} = g) :$

$S := \text{shadebetween}(f(x), g(x), x = -2 .. 1, \text{showboundary} = \text{false}, \text{color} = \text{grey}, \text{legend} = M) :$

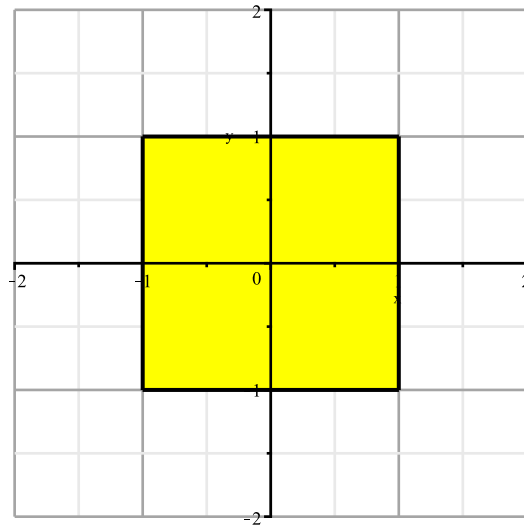
$\text{display}(F, G, S, \text{gridlines})$



"inequal"

God til at tegne uligheder.

Det kan udnyttes, når man vil illustrere en definitionsængde.

Eksempler:*restart**with(plots) :**inequal({ -1 ≤ x ≤ 1, -1 ≤ y ≤ 1 }, x=-2..2, y=-2..2, gridlines, color=yellow, transparency=0.5)**inequal({ (x - 1)² + y² ≤ 2² }, x=-3..4, y=-3..4, gridlines, color=green, transparency=0.5)*