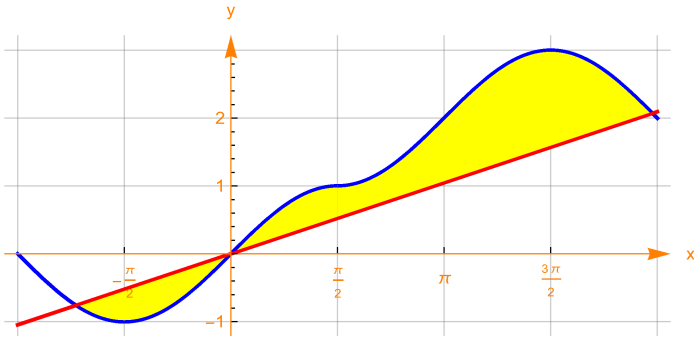
In[537]:=
```
(* Kontrolltöö
   Siim Erik Pugal
   179411YAFB      *)
fn[x_] := Module[{f}, If[x ≤ π/2, f = Sin[x], f = 2 - Cos[x - π/2]]]
punktid = Table[{{x, 0}, {x, fn[x]}}, {x, π / 2, 2 π, π/2}];
graafik = Plot[fn[x], {x, -π, 2 π}, PlotStyle → {Blue, Thick},
   AspectRatio -> Automatic, Ticks → {{-π, -π / 2, 0, π/2, π, 3π/2, 2 π}, Automatic},
   GridLines → {{-π, -π / 2, 0, π/2, π, 3π/2, 2 π}, {-1, 1, 2, 3}},
   AxesStyle → {{Thickness[0.004], Arrowheads[{0, 0.035}], Orange},
     {Thickness[0.004], Arrowheads[{0, 0.035}], Orange}}, AxesLabel → {"x", "y"}];
f2 = 1 / 3 * x;
graafik2 = Plot[{f2}, {x, -π, 2 π}, PlotStyle → {Red, Thick}];
"Lõikekohad:"
rajad = FindInstance[fn[x] == f2, x, Reals, 3] // N  (*Rajad/Lõikekohad*)
rajad[[1]];   (*Proov: Esimene element raja listist*)
ala1 = Plot[{fn[x], f2}, {x, 0, 6.212344553018566},
PlotStyle → {Blue, Red}, Filling → {1 → {2}},
FillingStyle → Yellow];
ala2 = Plot[{fn[x], f2}, {x, -2.2788626600758284, 0},
PlotStyle → {Blue, Red}, Filling → {1 → {2}},
FillingStyle → Yellow];
"Graafik:"
Show[graafik, graafik2, ala1, ala2]
S1 = NIntegrate[fn[x] - f2, {x, 0, 6.212344553018566},
    Method → {"NewtonCotesRule", "Order" → 2}] // Quiet ;
S2 = NIntegrate[f2 - fn[x], {x, -2.2788626600758284, 0},
    Method → {"NewtonCotesRule", "Order" → 2}] // Quiet;
"Kollase osa pindala:"
S  = S1 + S2
"8. oli liiga raske, et midagi kirja panna"
```

Out[542]= Lõikekohad:

Out[543]= {{x → 0.}, {x → -2.27886}, {x → 6.21234}}

Out[546]= Graafik:

Out[547]=




Out[550]= Kollase osa pindala:

Out[551]= 5.63321

Out[552]= 8. oli liiga raske, et midagi kirja panna