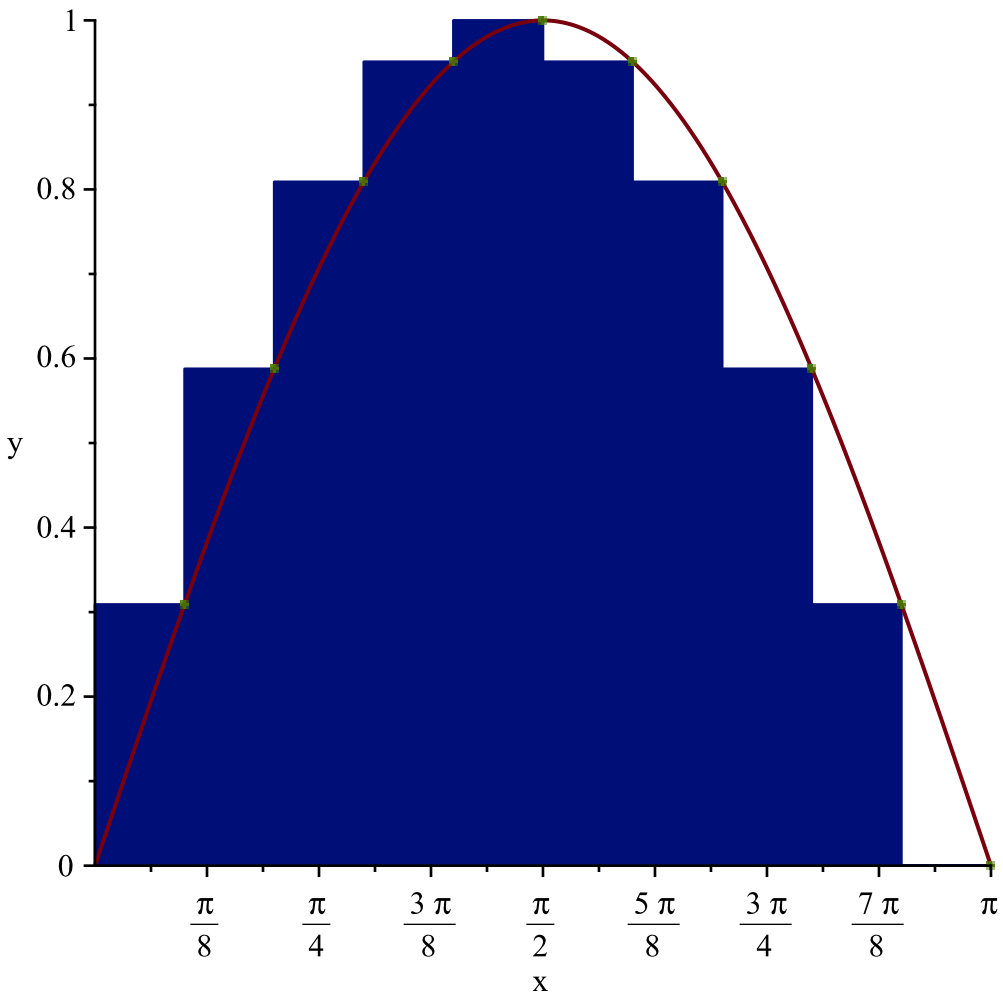
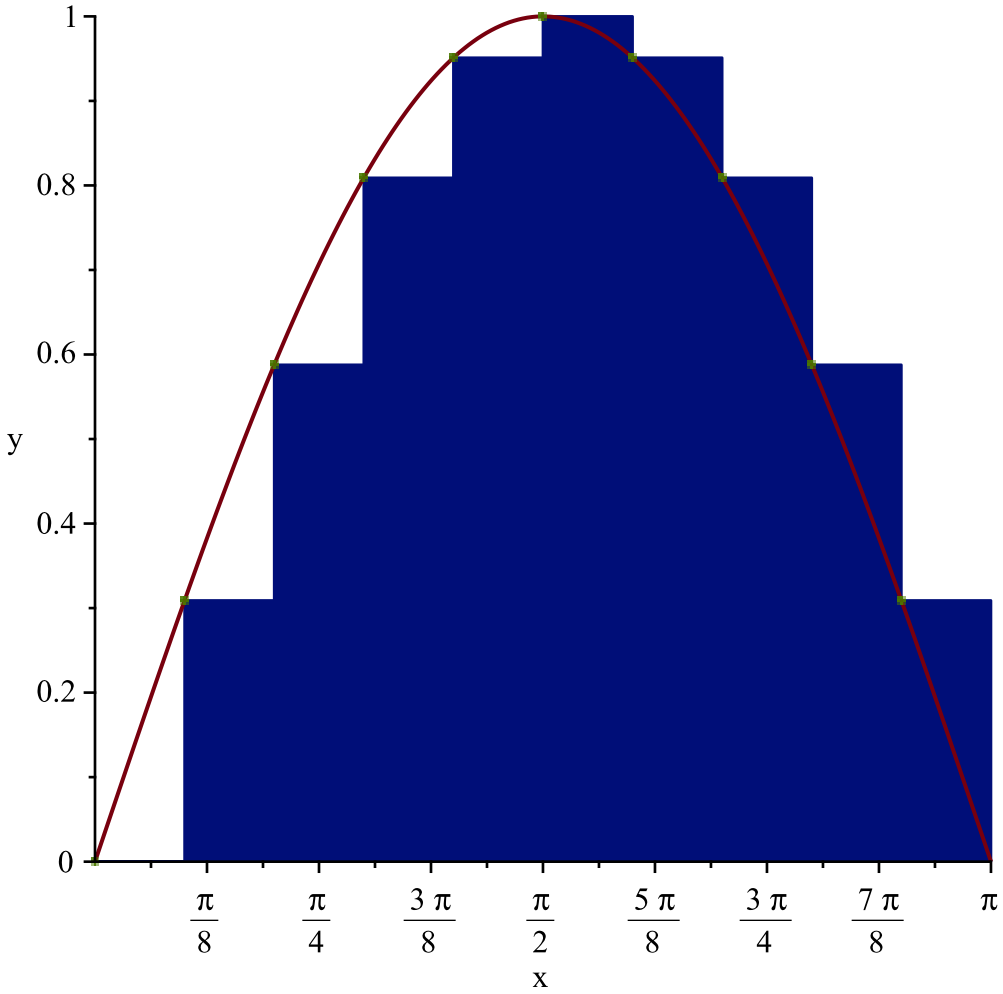
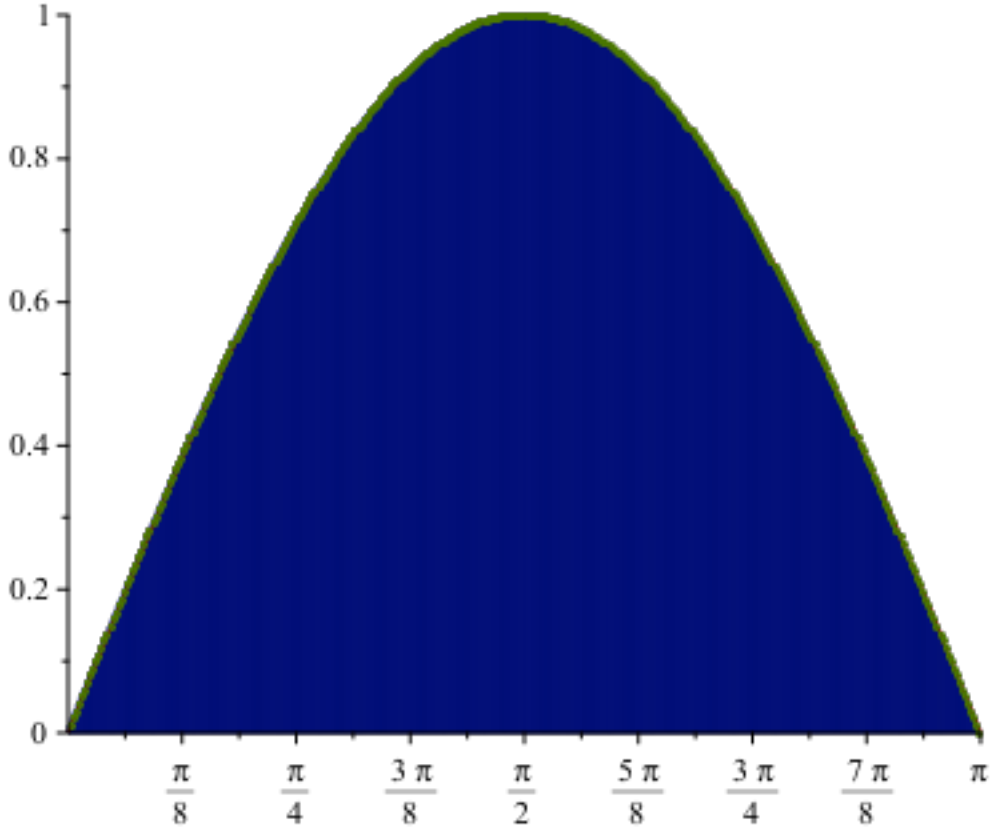

1
0.8
0.6
0.4
0.2
0
y
π/8
π/4
3 π/8
π/2
5 π/8
3 π/4
7 π/8
π
x

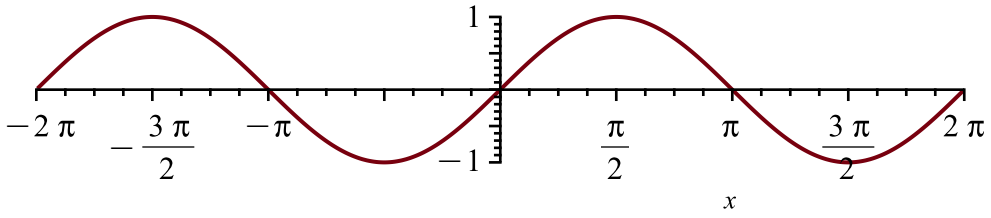


RiemannSum(sin(*x*), 0 .. Pi, '*partition*' = 10, '*method*' = *right*, '*partitiontype*' = *normal*, '*output*' = '*animation*', '*boxoptions*' = ['*filled*' = ['*transparency*' = .5]]);



An animated right Riemann sum approximation of $\int_0^{\pi} f(x)\,dx$, where $f(x) = \mathrm{si}$

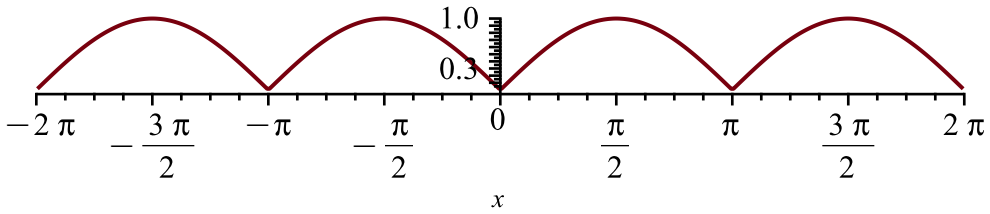
```
with(Student[Calculus1]):
with(plots):
plot(sin(x), scaling=constrained)
```



$$\int_0^{2\cdot \mathrm{Pi}} |\sin(x)|\, dx$$

4 **(1)**

plot(abs(sin(*x*)), *scaling* = *constrained*)


1.0
0.3
−2 π
−3 π/2
−π
−π/2
0
π/2
π
3 π/2
2 π
x