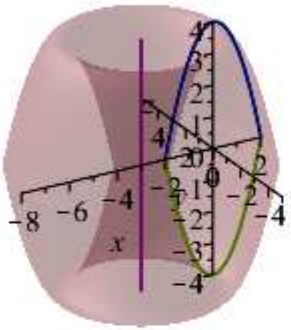
Calculus 1 - Volume of Revolution

File Help

Plot Window



Enter 1 or 2 functions and an interval

f(x) = -x^2+4

g(x) = x^2-4

a = -2 b = 2

Riemann sum

Method: midpoint

Number of partitions: 6

Volume of the Solid

$$\int_{-2}^{2} -4\pi(x+3)\left(x^2-4\right)dx$$

$$= 128\pi$$

$$= 402.1238597$$

Display

☑ Volume ○ Shells ○ Region ◉ None

Line of Revolution

○ Horizontal ◉ Vertical

Distance of rotation line from coordinate axis = -3

Display Animate Plot Options Close

Maple Command

```
VolumeOfRevolution(-x^2+4, x^2-4, -2..2, 'axis'=vertical, 'distancefromaxis' = -3,
'showvolume'=true, 'showsum'=false, 'showregion'=false, 'method'=midpoint, 'partition'=
6, 'output'=plot);
```