

```

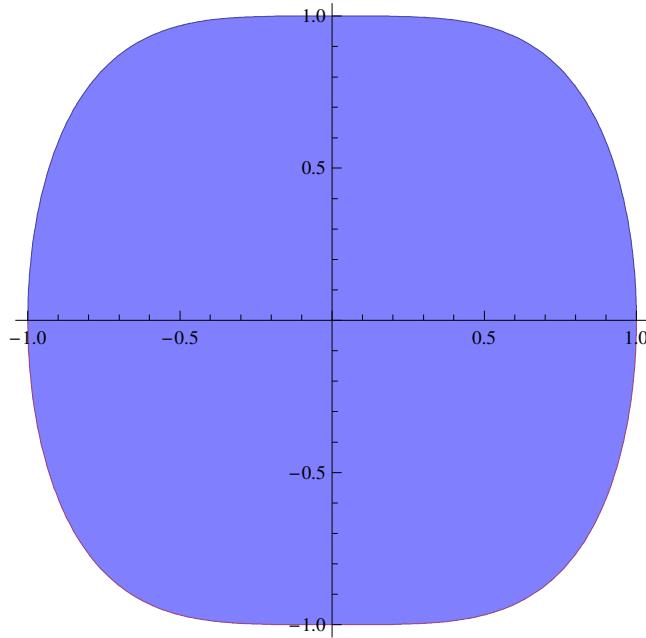
<< Graphics`FilledPlot`
$TextStyle = {FontFamily -> "Times", FontWeight -> "Bold", FontSize -> 16}
{FontFamily -> Times, FontWeight -> Bold, FontSize -> 16}

```

```

Problem01 = Plot [ { $\sqrt{1-x^4}$ ,  $-\sqrt{1-x^4}$ }, {x, -1, 1}, AspectRatio -> Automatic,
Filling -> {1 -> {{2}, RGBColor[0.5` , 0.5` , 1]}}, Filling -> {1 -> {2}}]

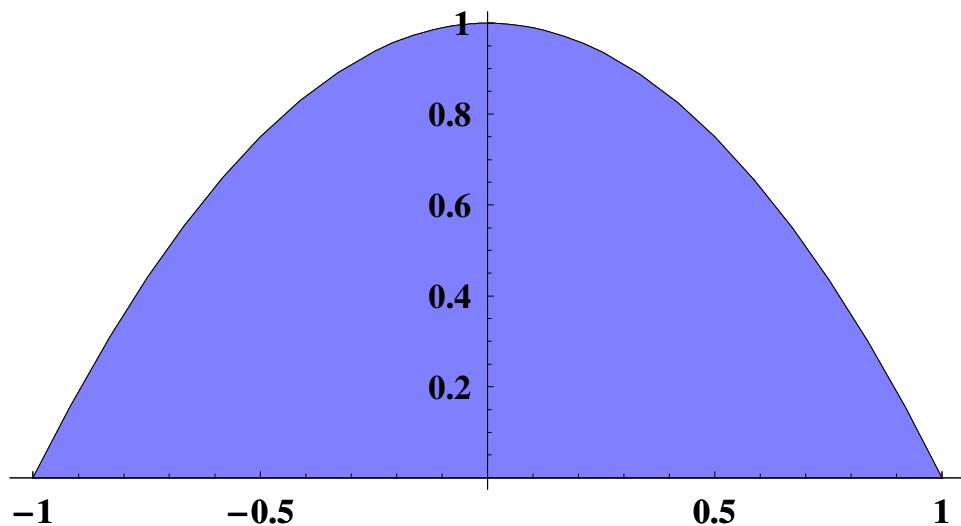
```



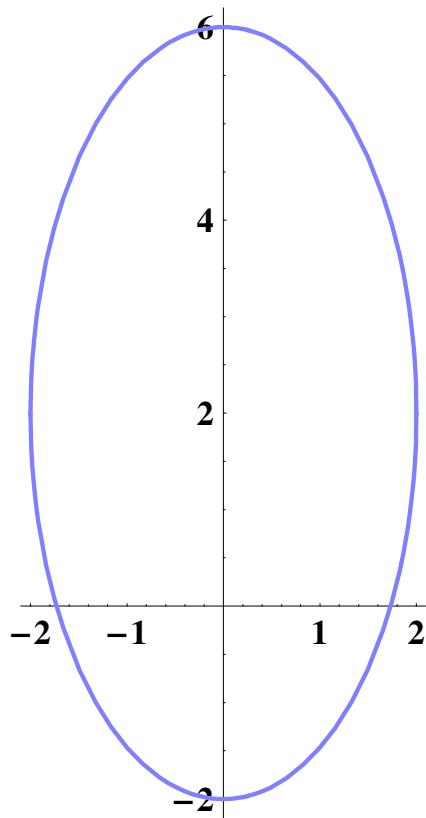
```

Problem02 = Plot [ {0,  $1-x^2$ }, {x, -1, 1}, AspectRatio -> Automatic,
Filling -> {1 -> {{2}, RGBColor[0.5` , 0.5` , 1]}}, Filling -> {1 -> {2}}]

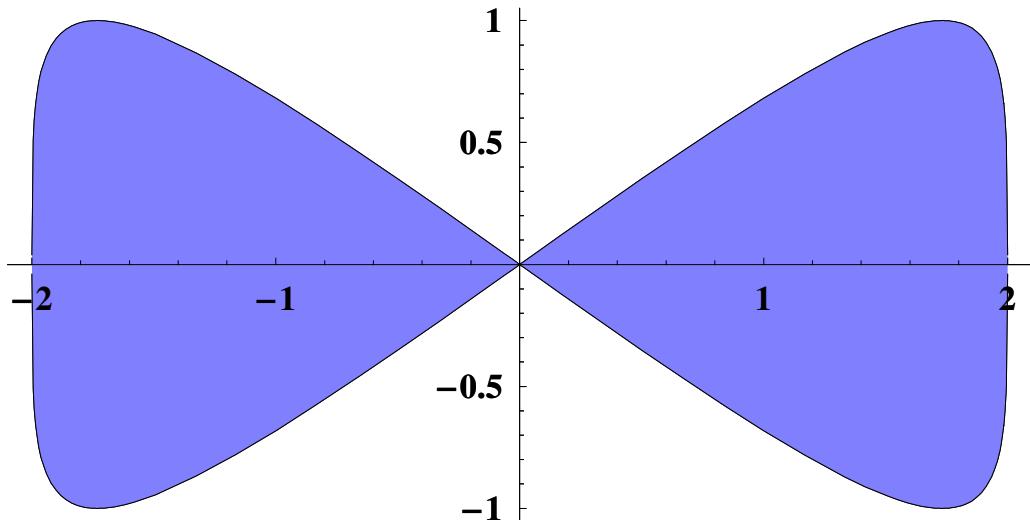
```



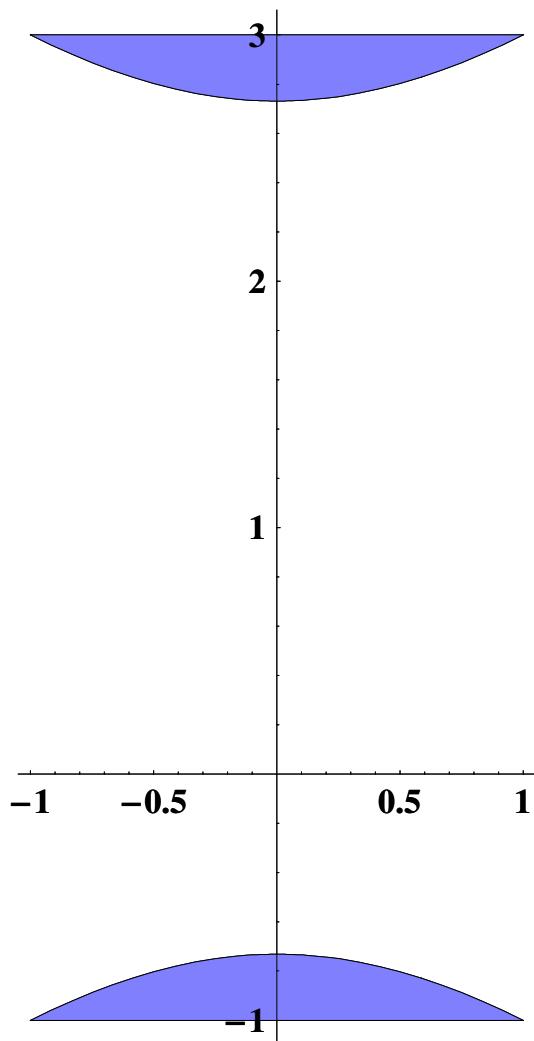
```
Problem03 = Plot [ { 2 - Sqrt [ 16 - 4 x^2 ] , 2 + Sqrt [ 16 - 4 x^2 ] } , { x , -2 , 2 } ,
Aspectratio -> Automatic , PlotStyle -> { { RGBColor [ 0.5` , 0.5` , 1] , AbsoluteThickness [ 2 ] } } ]
```



```
Problem04 = Plot [ { Sqrt [ 1 - ( 1 - Sqrt [ 4 - x^2 ] )^2 ] , -Sqrt [ 1 - ( 1 - Sqrt [ 4 - x^2 ] )^2 ] } , { x , -2 , 2 } ,
Aspectratio -> Automatic , Filling -> { 1 -> { { 2 } , RGBColor [ 0.5` , 0.5` , 1 ] } } , Filling -> { 1 -> { 2 } } ]
```



```
Problem05 = Plot[{\{1 + Sqrt[x^2 + 3], 3, 1 - Sqrt[x^2 + 3], -1\}, {x, -1, 1}, AspectRatio -> Automatic,
  Filling -> {1 -> {2}, RGBColor[0.5^, 0.5^, 1]}, 3 -> {4}, RGBColor[0.5^, 0.5^, 1]}},
  Filling -> {1 -> {2}, 2 -> {3}, 3 -> {4}}]
```



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