

```
In[5]:= NIntegrate[Pi*(5 - ArcSin[y])^2, {y, 0, 0.9487}] - NIntegrate[Pi*(5 - (y + 1)^(1/3))^2, {y, 0, 0.9487}]
```

```
Out[5]= 15.3681
```

```
In[7]:= NIntegrate[2*Pi*(5 - x)*Sin[x], {x, 0, 1}] + NIntegrate[2*Pi*(5 - x)*(Sin[x] - x^3 + 1), {x, 1, 1.2491}]
```

```
Out[7]= 15.3681
```