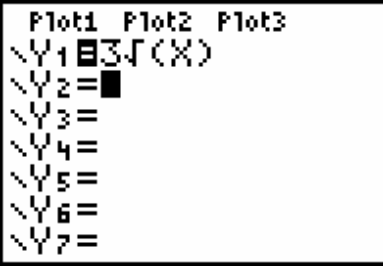
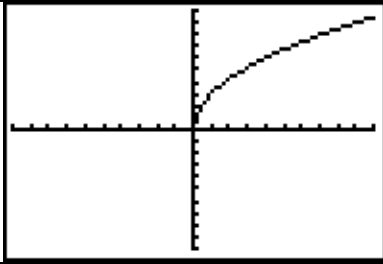
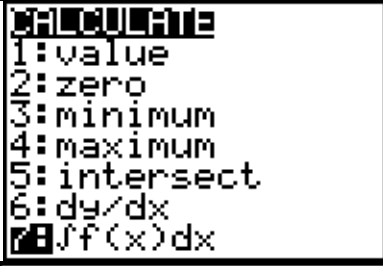
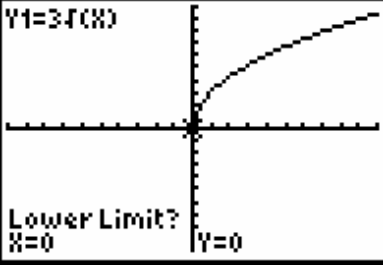
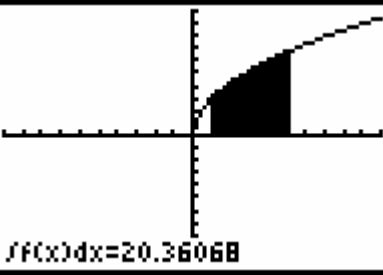
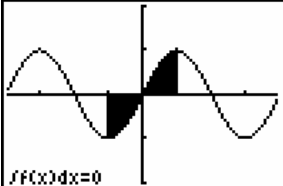


## Using The TI 83/84 To Find The Area Under A Curve

Example: Find the area under the curve from  $x=1$  to  $x=2$  on  $[1,5]$ .  $y = 3\sqrt{x}$

Enter $f(x)$ into $Y_1$	
Graph $f(x)$	
Press 2nd CALC 7	
Enter lower limit 1 Press ENTER  Enter upper limit 5 Press ENTER.	
The calculator will determine the area between the curve and the x-axis.	
<p>NOTE: The calculator actually evaluates the INTEGRAL. If the curve is both above and below the <math>x</math>-axis, the calculator will add the negative “area” to the positive “area”. For example, if <math>f(x) = \sin x</math> on <math>[-\pi/2, \pi/2]</math>, the integral is equal to zero but the area is actually equal to 2.</p> <div style="text-align: center;">  <p><math>\int f(x) dx = 0</math></p> </div>	