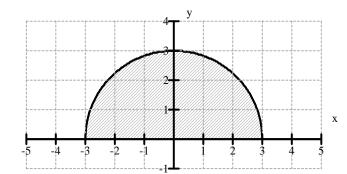
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1) To evaluate  $\int_{-3}^{3} \sqrt{9-x^2} dx$ , you can look at the area below.

The area of a semicircle is  $\frac{\pi r^2}{2}$ . Here, this is  $\frac{\pi(3)^2}{2} = \frac{9\pi}{2}$ 



2) To evaluate  $\int_0^3 \sqrt{9-x^2} dx$ , you can look at the area below.

The area of a quarter circle is  $\frac{\pi r^2}{4}$ . Here, this is  $\frac{\pi (3)^2}{4} = \frac{9\pi}{4}$ 

