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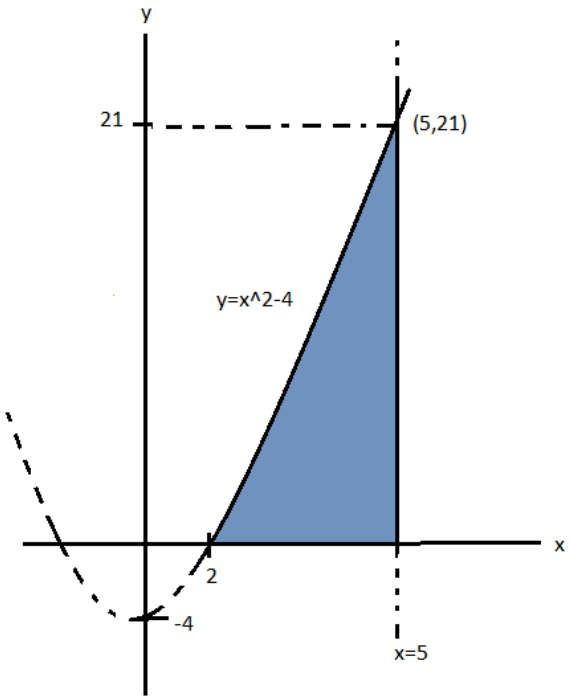

$y = x^2 - 4$ is a parabola opening upwards with vertex (0,-4).

The parabola intersects the $x-$axis on points (-2,0) and (2,0).

To find the point of intersection of the parablola and the line $x = 5$, we solve the equations simultaneously.

For example; solving $y = x^2 - 4$ and $x = 5$, we get $y = 21$.

Remember that, Area bounded by the curves is given by,

Area $= \int_a^b f(x) - g(x)\, dx$, where $f(x)$ **is the upper curve** and $g(x)$ **is the lower curve** and $x \in [a, b]$.

In this case, the upper function is $f(x) = x^2 - 4$ and lower function is $g(x) = 0$ and $x \in [2, 5]$.

$$\begin{aligned}
\text{Area} &= \int_a^b f(x) - g(x)\, dx \\
&= \int_2^5 x^2 - 4\, dx \\
&= \left[\frac{x^3}{3} - 4x\right]_2^5 = 27 \text{ square units}
\end{aligned}$$