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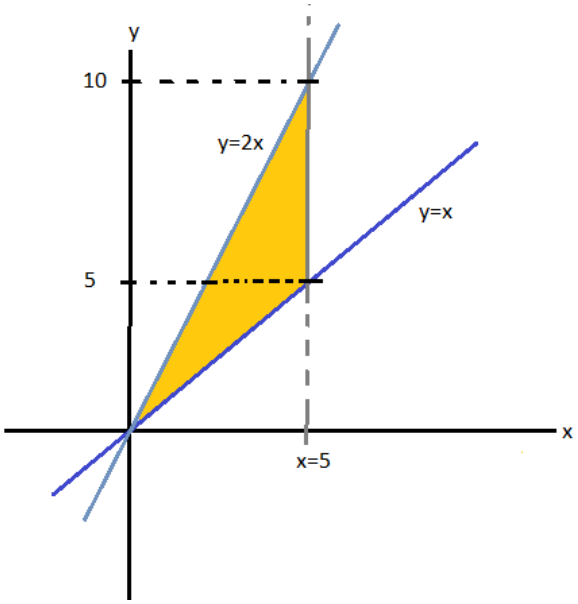

$x = 5$ is a straight line.
$y = 2x$ is a straight line.
$y = x$ is a straight line.

To find the point of intersection of the straight lines, we solve the equations simultaneously.

For example; solving $y = 2x$ and x $= 5$, we get $y = 10$

Similarly, solving $y = x$ and x $= 5$, we get $y = 5$.

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 $f(x) = 2x$ and lower function is $g(x) = x$ and $x \in [0, 5]$.

$$
\begin{aligned}
\text{Area} &= \int_a^b f(x) - g(x)\, dx \\
&= \int_0^5 2x - x\, dx \\
&= \int_0^5 x\, dx \\
&= \left[\frac{x^2}{2}\right]_0^5 \\
&= \left(\frac{5^2}{2}\right) - \left(\frac{0}{2}\right) \\
&= \frac{25}{2} \text{ square units}
\end{aligned}
$$