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Solving systems by the method of substitution.

Solve the system Eq1: $\quad y=2 x$
Eq: $x+y=3$

1) Take $2 x$ from Eq1. and plug it into Eq: for $y$. $x+(2 x)=3 \quad$ This is the step of substitution.
2) Now you can solve for $x$.

$$
3 x=3 \quad \text { Add the } x \text { 's together. }
$$

3) Now we apply the operation of division.

$$
\begin{aligned}
\frac{3 x}{3}=\frac{3}{3} & \text { Setup the division } \\
x=1 & \text { Complete the division }
\end{aligned}
$$

4) Now that we know $x=1$, we have to find the corresponding value of $y$.
$y=2(1)=2 \quad$ Replace $x$ with 1 in Eq.
5) So the final solution is the pint $(1,2)$
