No Need to Memorize the t -value , $\sigma$ formulas, they will be given in the question.

## How to solve (two samples test) using TDist

Step 1 State the hypotheses and identify the claim.
Step 2 To find p -value

$$
\begin{aligned}
& \text { To find } \mathrm{p} \text {-value } \\
& \text { Compute the test value. } \quad t=\frac{\bar{x}-\bar{y}}{\sigma_{x, y} * \sqrt{2 / n}} \quad \text { where: } \sigma_{x y}=\sqrt{\frac{1}{2}\left(\sigma_{x}^{2}+\sigma_{y}^{2}\right)}
\end{aligned}
$$

Then use Tdist function with degree of freedom $=\mathbf{2 n}-2$
Step 3 Make the decision depending on Table 1

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## How to solve (one sample test) using TDist

Step 1 State the hypotheses and identify the claim.
Step 2 To find p -value using the Tdist function :

Compute the test value.

| Tdist function : |
| :---: |
| $t=\frac{\bar{x}-\mu_{0}}{\sigma / \sqrt{n}}$ |

$x$
Where: $\quad$ is the sample mean, $\sigma$ sample standard deviation, $\boldsymbol{n}$ is the sample size, and $\mu_{0}$ is the population mean. Distribution of the sample is assumed to be normal then you'll use Tdist function to find P -value with degree of freedom $=\mathrm{n}-1$.

Step 3 Make the decision depending on Table 1

