**القوانين 324 احص**

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|  | $$\overbar{X}\pm t\_{1-\frac{α}{2}}. \frac{S}{\sqrt{n}}$$ |
| $$Z=\frac{\left(\overbar{X}\_{1}-\overbar{X}\_{2}\right)-d}{\sqrt{\frac{σ\_{1}^{2}}{n\_{1}}+\frac{σ\_{2}^{2}}{n\_{2}}}}$$ | $$(\overbar{X}\_{1}-\overbar{X}\_{2})\pm Z\_{1-\frac{α}{2}} \sqrt{\frac{σ\_{1}^{2}}{n\_{1}}+\frac{σ\_{2}^{2}}{n\_{2}}}$$ |
| $$T=\frac{\left(\overbar{X}\_{1}-\overbar{X}\_{2}\right)-d}{S\_{P} .\sqrt{\frac{1}{n\_{1}}+\frac{1}{n\_{2}}}}$$ | $$(\overbar{X}\_{1}-\overbar{X}\_{2})\pm t\_{1-\frac{α}{2}}. S\_{P} .\sqrt{\frac{1}{n\_{1}}+\frac{1}{n\_{2}}}$$ |
| $$Z=\frac{\hat{P}-P\_{0}}{\sqrt{\frac{p\_{0}q\_{0}}{n}}}$$ | $$S\_{P}^{2}=\frac{\left(n\_{1}-1\right)S\_{1}^{2}+\left(n\_{2}-1\right)S\_{2}^{2}}{n\_{1}+n\_{2}-2}$$ |
| $$(\hat{p}\_{1}-\hat{p}\_{2})\pm Z\_{1-\frac{α}{2}} \sqrt{\frac{\hat{p}\_{1}\hat{q}\_{1}}{n\_{1}}+\frac{\hat{p}\_{2}\hat{q}\_{2}}{n\_{2}}}$$ |
| $$ n=\frac{Z\_{1-\frac{α}{2}}^{2}\hat{p}\hat{q}}{e^{2}}$$ | $$\hat{P}\pm Z\_{1-\frac{α}{2}} \sqrt{\frac{\hat{p}\hat{q}}{n}}$$ |
|  | $e=Z\_{1-\frac{α}{2}} \frac{σ}{\sqrt{n}}$ **,** | $$e=Z\_{1-\frac{α}{2}} \sqrt{\frac{\hat{p}\hat{q}}{n}}$$ |
|  |
| **Values of Z** |
| $$Z\_{0.90}$$ | **1.285** |
| $$Z\_{0.95}$$ | **1.645** |
| $$Z\_{0.97}$$ | **1.885** |
| $$Z\_{0.975}$$ | **1.96** |
| $$Z\_{0.98}$$ | **2.055** |
| $$Z\_{0.99}$$ | **2.325** |
| $$Z\_{0.995}$$ | **2.575** |