\[ t(\mu_1 = 6.7, \sigma_1 = 0.08, \nu = 24.79) \]

\[ P(\mu_1 > \mu_2) = 0 \]

\[ P(-0.996 < \mu_1 - \mu_2 < -0.625) = 0.95 \text{ (sig)} \]
\( t(\mu_1 = 7.95, \sigma_1 = 0.27, \nu = 20.11) \)

\[ P(\mu_1 > \mu_2) = 0.996 \]

\( F(0.135 < \mu_1 - \mu_2 < 0.755) = 0.95 \) (sig)
\[ t(\mu_1 = 7.3, \sigma_1 = 0.2, \nu = 22.45) \]

\[ P(\mu_1 > \mu_2) = 0.048 \]

\[ P(-0.463 < \mu_1 - \mu_2 < 0.036) = 0.95 \]

\[ t(\mu_2 = 7.51, \sigma_2 = 0.18, \nu = 22.45) \]
$t(\mu_1 = 7.67, \sigma_1 = 0.16, \nu = 23.83)$

$P(\mu_1 > \mu_2) = 0.931$

$P(-0.061 < \mu_1 - \mu_2 < 0.384) = 0.95$
\( t(\mu_1 = 7.23, \sigma_1 = 0.17, \nu = 23.55) \)

\( P(\mu_1 > \mu_2) = 0.008 \)

\( P(-0.515 < \mu_1 - \mu_2 < -0.057) = 0.95 \) (sig)
\[ t(\mu_1 = 7.68, \sigma_1 = 0.13, \nu = 22.59) \]

\[ P(\mu_1 > \mu_2) = 0.949 \]

\[ P(-0.035 < \mu_1 - \mu_2 < 0.386) = 0.95 \]
\[ t(\mu_1 = 7.47, \sigma_1 = 0.07, \nu = 24.52) \]

\[ P(\mu_1 > \mu_2) = 0.326 \]

\[ P(-0.219 < \mu_1 - \mu_2 < 0.136) = 0.95 \]

\[ t(\mu_2 = 7.51, \sigma_2 = 0.18, \nu = 24.52) \]
\[ t(\mu_1 = 7.47, \sigma_1 = 0.25, \nu = 18.79) \]

\[ P(\mu_1 > \mu_2) = 0.407 \]

\[ P(-0.321 < \mu_1 - \mu_2 < 0.256) = 0.95 \]
\[ t(\mu_1 = 7.29, \sigma_1 = 0.13, \nu = 21.3) \]

\[ P(\mu_1 > \mu_2) = 0.021 \]

\[ P(-0.421 < \mu_1 - \mu_2 < -0.001) = 0.95 \text{ (sig)} \]
\( t(\mu_1 = 7.28, \sigma_1 = 0.07, \nu = 24.49) \)

\( P(\mu_1 > \mu_2) = 0.006 \)

\( P(-0.415 < \mu_1 - \mu_2 < -0.057) = 0.95 \) (sig)
\( t(\mu_1 = 7.25, \sigma_1 = 0.12, \nu = 22.95) \)

\[ P(\mu_1 > \mu_2) = 0.008 \]

\( t(\mu_2 = 7.51, \sigma_2 = 0.18, \nu = 22.95) \)

\[ P(-0.455 < \mu_1 - \mu_2 < -0.05) = 0.95 \text{ (sig)} \]
\[ t(\mu_1 = 7.34, \sigma_1 = 0.24, \nu = 20.77) \]

\[ P(\mu_1 > \mu_2) = 0.104 \]

\[ P(-0.453 < \mu_1 - \mu_2 < 0.098) = 0.95 \]
$t(\mu_1 = 7.28, \sigma_1 = 0.18, \nu = 19.03)$

$P(\mu_1 > \mu_2) = 0$

$P(\mu_1 - \mu_2 < -0.424) = 0.95$
The t-distribution with parameters $\mu_1 = 7.57, \sigma_1 = 0.12, \nu = 19.42$ is shown.

The probability $P(\mu_1 > \mu_2) = 0.002$.

The probability $P(-0.741 < \mu_1 - \mu_2 < -0.166) = 0.95$ (sig).
\[ t(\mu_1 = 7.39, \sigma_1 = 0.05, \nu = 20.91) \]

\[ P(\mu_1 > \mu_2) = 0 \]

\[ P(-0.909 < \mu_1 - \mu_2 < -0.371) = 0.95 \text{ (sig)} \]
\[ t(\mu_1 = 7.52, \sigma_1 = 0.19, \nu = 19.65) \]

\[ P(\mu_1 > \mu_2) = 0.002 \]

\[ P( -0.828 < \mu_1 - \mu_2 < -0.181 ) = 0.95 \text{ (sig)} \]
$t(\mu_1 = 7.7, \sigma_1 = 0.3, \nu = 15.26)$

$P(\mu_1 > \mu_2) = 0.057$

$P(-0.714 < \mu_1 - \mu_2 < 0.083) = 0.95$
\[ t(\mu_1 = 7.32, \sigma_1 = 0.06, \nu = 21.96) \]

\[ P(\mu_1 > \mu_2) = 0 \]

\[ P(-0.976 < \mu_1 - \mu_2 < -0.436) = 0.95 \text{ (sig)} \]
\[ t(\mu_1 = 7.25, \sigma_1 = 0.12, \nu = 21.33) \]

\[ P(\mu_1 > \mu_2) = 0 \]

\[ P(-1.058 < \mu_1 - \mu_2 < -0.479) = 0.95 \text{ (sig)} \]
$t(\mu_1 = 7.24, \sigma_1 = 0.03, \nu = 22.47)$

$P(\mu_1 > \mu_2) = 0$

$P(-1.048 < \mu_1 - \mu_2 < -0.523) = 0.95 \text{ (sig)}$

$AFUB_077250 (I-10b)$

$A1160p+ (I-10b)$
\[ t(\mu_1 = 7.23, \sigma_1 = 0.07, \nu = 21.09) \]

\[ P(\mu_1 > \mu_2) = 0 \]

\[ P(-1.062 < \mu_1 - \mu_2 < -0.516) = 0.95 \text{ (sig)} \]
\( t(\mu_1 = 7.48, \sigma_1 = 0.22, \nu = 14.67) \)

\[ P(\mu_1 > \mu_2) = 0.002 \]

\[ P(-0.877 < \mu_1 - \mu_2 < -0.198) = 0.95 \text{ (sig)} \]
\( P(\mu_1 > \mu_2) = 0 \)

\( t(\mu_1 = 7.38, \sigma_1 = 0.01, \nu = 22.78) \)

\( P(-0.909 < \mu_1 - \mu_2 < -0.382) = 0.95 \) (sig)
\( t(\mu_1 = 6.98, \sigma_1 = 0.18, \nu = 23.31) \)

\[ P(\mu_1 > \mu_2) = 0 \]

\( P(-1.049 < \mu_1 - \mu_2 < -0.595) = 0.95 \text{ (sig)} \)
\( t(\mu_1 = 7.62, \sigma_1 = 0.25, \nu = 19.46) \)

\[ P(\mu_1 > \mu_2) = 0.098 \]

\[ P(-0.451 < \mu_1 - \mu_2 < 0.107) = 0.95 \]
\[ t(\mu_1 = 7.35, \sigma_1 = 0.15, \nu = 24.29) \]

\[ P(\mu_1 > \mu_2) = 0 \]

\[ P(-0.664 < \mu_1 - \mu_2 < -0.245) = 0.95 \text{ (sig)} \]
t(μ₁ = 7.31, σ₁ = 0.06, v = 25.53)

P(μ₁ > μ₂) = 0

P(−0.658 < μ₁ − μ₂ < −0.33) = 0.95 (sig)
\[ t(\mu_1 = 7.12, \sigma_1 = 0.08, \nu = 24.28) \]

\[ P(\mu_1 > \mu_2) = 0 \]

\[ P(\mu_1 - \mu_2 < -0.508) = 0.95 \text{ (sig)} \]
\[ t(\mu_1 = 7.39, \sigma_1 = 0.2, \nu = 21.6) \]

\[ P(\mu_1 > \mu_2) = 0.001 \]

\[ P(\mu_1 \leq \mu_2) = 0.95 \text{ (sig)} \]

\[ t(\mu_2 = 7.8, \sigma_2 = 0.16, \nu = 21.6) \]
\[ t(\mu_1 = 7.34, \sigma_1 = 0.15, \nu = 21.83) \]

\[ P(\mu_1 > \mu_2) = 0 \]

\[ P(-0.675 < \mu_1 - \mu_2 < -0.248) = 0.95 \text{ (sig)} \]
\[ t(\mu_1 = 7.43, \sigma_1 = 0.21, \nu = 20.98) \]

\[ P(\mu_1 > \mu_2) = 0.003 \]

\[ P(-0.619 < \mu_1 - \mu_2 < -0.123) = 0.95 \text{ (sig)} \]
$$P(\mu_1 > \mu_2) = 0$$

$$P(-0.756 < \mu_1 - \mu_2 < -0.376) = 0.95 \text{ (sig)}$$

$$t(\mu_1 = 7.23, \sigma_1 = 0.11, \nu = 24.05)$$

$$t(\mu_2 = 7.8, \sigma_2 = 0.17, \nu = 24.05)$$
\[ t(\mu_1 = 8.17, \sigma_1 = 0.15, \nu = 22.83) \]

\[ P(\mu_1 > \mu_2) = 0 \]

\[ P(\mu_1 > \mu_2) = 0 \]

\[ t(\mu_2 = 8.82, \sigma_2 = 0.1, \nu = 22.83) \]

\[ P(-0.822 < \mu_1 - \mu_2 < -0.481) = 0.95 \text{ (sig)} \]
\[ t(\mu_1 = 8.76, \sigma_1 = 0.12, \nu = 23.13) \]

\[ P(\mu_1 > \mu_2) = 0.213 \]

\[ P(\mu_1 = \mu_2) = 0.95 \]

\[ P(-0.206 < \mu_1 - \mu_2 < 0.09) = 0.95 \]
\( t(\mu_1 = 8.77, \sigma_1 = 0.09, \nu = 25.27) \)

\[ P(\mu_1 > \mu_2) = 0.215 \]

\[ P(-0.176 < \mu_1 - \mu_2 < 0.084) = 0.95 \]
\( t(\mu_1 = 8.71, \sigma_1 = 0.08, \nu = 24.25) \)

\( P(\mu_1 > \mu_2) = 0.036 \)

\( \mu_{\text{diff}} \)

Frequency

\( -0.4 \quad -0.2 \quad 0.0 \quad 0.2 \)

\( P(-0.231 < \mu_1 - \mu_2 < 0.011) = 0.95 \)

\( t(\mu_2 = 8.82, \sigma_2 = 0.1, \nu = 24.25) \)
$t(\mu_1 = 8.81, \sigma_1 = 0.03, \nu = 25.43)$

$P(\mu_1 > \mu_2) = 0.372$

$P(\mu_1 > \mu_2) = 0.372$

$P(-0.111 < \mu_1 - \mu_2 < 0.088) = 0.95$
\( t(\mu_1 = 8.69, \sigma_1 = 0.14, \nu = 25.16) \)

\[ P(\mu_1 > \mu_2) = 0.057 \]

\[ P(-0.29 < \mu_1 - \mu_2 < 0.03) = 0.95 \]
t(µ₁ = 8.79, σ₁ = 0.1, ν = 25.65)

P(µ₁ > µ₂) = 0.302

P(−0.165 < µ₁ − µ₂ < 0.101) = 0.95

AFUB_080790 (I−11a)

A1160p+ (I−11a)
\( t(\mu_1 = 8.68, \sigma_1 = 0.1, \nu = 25.49) \)

\[ P(\mu_1 > \mu_2) = 0.021 \]

\[ P(-0.27 < \mu_1 - \mu_2 < -0.008) = 0.95 \text{ (sig)} \]
* \( t(\mu_1 = 8.67, \sigma_1 = 0.2, \nu = 19.09) \)

* \( P(\mu_1 > \mu_2) = 0.069 \)

* \( P(-0.367 < \mu_1 - \mu_2 < 0.063) = 0.95 \)
$t(\mu_1 = 8.4, \sigma_1 = 0.26, \nu = 22.17)$

$P(\mu_1 > \mu_2) = 0.002$

$P(-0.68 < \mu_1 - \mu_2 < -0.158) = 0.95$ (sig)

$P(\mu_2 > \mu_1) = 0.002$

$P(-0.158 < \mu_1 - \mu_2 < 0.68) = 0.95$ (sig)
\[ t(\mu_1 = 8.19, \sigma_1 = 0.2, \nu = 23.05) \]

\[ P(\mu_1 > \mu_2) = 0 \]

\[ P(-0.844 < \mu_1 - \mu_2 < -0.429) = 0.95 \text{ (sig)} \]
\[ t(\mu_1 = 7.94, \sigma_1 = 0.36, \nu = 19.89) \]

\[ P(\mu_1 > \mu_2) = 0.001 \]

\[ P(−0.974 < \mu_1 − \mu_2 < −0.258) = 0.95 \] (sig)
\( t(\mu_1 = 8.51, \sigma_1 = 0.14, \nu = 24.29) \)

\[ P(\mu_1 > \mu_2) = 0.224 \]

\( P(-0.211 < \mu_1 - \mu_2 < 0.097) = 0.95 \)
$t(\mu_1 = 8.16, \sigma_1 = 0.13, \nu = 26.22)$

$P(\mu_1 > \mu_2) = 0$

$P(-0.547 < \mu_1 - \mu_2 < -0.25) = 0.95$ (sig)
t(\mu_1 = 8.03, \sigma_1 = 0.21, \nu = 23.51)

P(\mu_1 > \mu_2) = 0

P( -0.747 < \mu_1 - \mu_2 < -0.311 ) = 0.95 (sig)
\( t(\mu_1 = 8.4, \sigma_1 = 0.09, \nu = 26.21) \)

\[ P(\mu_1 > \mu_2) = 0.005 \]

\[ P(-0.285 < \mu_1 - \mu_2 < -0.047) = 0.95 \text{ (sig)} \]
$t(\mu_1 = 8.1, \sigma_1 = 0.25, \nu = 21.6)$

$P(\mu_1 > \mu_2) = 0$

$P(-0.704 < \mu_1 - \mu_2 < -0.218) = 0.95$ (sig)

$PUB_083950 (I-11b)$
\[ t(\mu_1 = 8.23, \sigma_1 = 0.2, \nu = 25.91) \]

\[ P(\mu_1 > \mu_2) = 0.002 \]

\[ P(-0.536 < \mu_1 - \mu_2 < -0.134) = 0.95 \text{ (sig)} \]
\( t(\mu_1 = 8.5, \sigma_1 = 0.21, \nu = 24.28) \)

\[ P(\mu_1 > \mu_2) = 0.268 \]

\( \mu_1 - \mu_2 \)

\[ P(-0.273 < \mu_1 - \mu_2 < 0.145) = 0.95 \]

AFUB_084620 (I−11b)

A1160p+ (I−11b)
\[ t(\mu_1 = 8.45, \sigma_1 = 0.22, \nu = 23.04) \]

\[ P(\mu_1 > \mu_2) = 0.16 \]

\[ P(-0.344 < \mu_1 - \mu_2 < 0.106) = 0.95 \]
\( t(\mu_1 = 8.27, \sigma_1 = 0.16, \nu = 25.56) \)

\[ P(\mu_1 > \mu_2) = 0.001 \]

\[ P( -0.469 < \mu_1 - \mu_2 < -0.129 ) = 0.95 \text{ (sig)} \]
\[ t(\mu_1 = 8.32, \sigma_1 = 0.16, \nu = 25.36) \]

\[ P(\mu_1 > \mu_2) = 0.005 \]

\[ P(-0.409 < \mu_1 - \mu_2 < -0.07) = 0.95 \text{ (sig)} \]

\[ t(\mu_2 = 8.56, \sigma_2 = 0.08, \nu = 25.36) \]
\( t(\mu_1 = 8.16, \sigma_1 = 0.33, \nu = 20.99) \)

\[ P(\mu_1 > \mu_2) = 0.011 \]

\[ P(-0.727 < \mu_1 - \mu_2 < -0.071) = 0.95 \text{ (sig)} \]
\[ t(\mu_1 = 7.05, \sigma_1 = 0.3, \nu = 11.7) \]

\[ P(\mu_1 > \mu_2) = 0 \]

\[ P(-1.095 < \mu_1 - \mu_2 < -0.387) = 0.95 \text{ (sig)} \]
\( P(\mu_1 > \mu_2) = 0.372 \)

\[ t(\mu_1 = 7.77, \sigma_1 = 0.13, \nu = 25.34) \]

\[ P(-0.199 < \mu_1 - \mu_2 < 0.151) = 0.95 \]

\[ P(\mu_1 - \mu_2 = 7.8, \sigma_2 = 0.13, \nu = 25.34) \]
\( t(\mu_1 = 7.85, \sigma_1 = 0.15, \nu = 25.01) \)

\( P(\mu_1 > \mu_2) = 0.718 \)

\( P(-0.133 < \mu_1 - \mu_2 < 0.233) = 0.95 \)
$t(\mu_1 = 7.87, \sigma_1 = 0.25, \nu = 22.31)$

$P(\mu_1 > \mu_2) = 0.698$

$P(-0.199 < \mu_1 - \mu_2 < 0.332) = 0.95$
\( t(\mu_1 = 8.1, \sigma_1 = 0.22, \nu = 23.7) \)

\[ P(\mu_1 > \mu_2) = 0.992 \]

\[ P(0.072 < \mu_1 - \mu_2 < 0.552) = 0.95 \text{ (sig)} \]

AFUB_090440 (I-12a)

A1160p+ (I-12a)
$t(\mu_1 = 8.68, \sigma_1 = 0.26, \nu = 21.07)$

$P(\mu_1 > \mu_2) = 1$

$P(0.597 < \mu_1 - \mu_2 < 1.154) = 0.95$ (sig)
\[ t(\mu_1 = 8.12, \sigma_1 = 0.19, \nu = 24.31) \]

\[ P(\mu_1 > \mu_2) = 0.997 \]

\[ P(0.103 < \mu_1 - \mu_2 < 0.53) = 0.95 \text{ (sig)} \]
$t(\mu_1 = 7.86, \sigma_1 = 0.13, \nu = 24.38)$

$P(\mu_1 > \mu_2) = 0.774$

AFUB_091930 (I−12a)

$P(-0.111 < \bar{\mu}_1 - \bar{\mu}_2 < 0.23) = 0.95$
\[ t(\mu_1 = 7.86, \sigma_1 = 0.19, \nu = 25.02) \]

\[ P(\mu_1 > \mu_2) = 0.729 \]

\[ P(-0.15 < \mu_1 - \mu_2 < 0.28) = 0.95 \]
\[ t(\mu_1 = 8.07, \sigma_1 = 0.12, \nu = 25.33) \]

\[ P(\mu_1 > \mu_2) = 0.998 \]

\[ P(0.109 < \mu_1 - \mu_2 < 0.447) = 0.95 \text{ (sig)} \]
\[ t(\mu_1 = 7.93, \sigma_1 = 0.17, \nu = 24.82) \]

\[ P(\mu_1 > \mu_2) = 0.904 \]

\[ P(-0.072 < \mu_1 - \mu_2 < 0.333) = 0.95 \]
\[ t(\mu_1 = 7.89, \sigma_1 = 0.15, \nu = 25.13) \]

\[ P(\mu_1 > \mu_2) = 0.836 \]

\[ P(-0.101 < \mu_1 - \mu_2 < 0.27) = 0.95 \]
\[
\begin{align*}
\mu_1 &= 7.23, \quad \sigma_1 = 0.29, \quad \nu = 18.87 \\
\mu_2 &= 7.95, \quad \sigma_2 = 0.15, \quad \nu = 18.87 \\
\end{align*}
\]

\[
P(\mu_1 > \mu_2) = 0
\]

\[
P(-1.044 < \mu_1 - \mu_2 < -0.402) = 0.95 \quad \text{(sig)}
\]
$t(\mu_1 = 8.13, \sigma_1 = 0.16, \nu = 24.44)$

$P(\mu_1 > \mu_2) = 0.961$

$P(-0.016 < \mu_1 - \mu_2 < 0.4) = 0.95$
\begin{align*}
t(\mu_1 = 8.13, \sigma_1 = 0.31, \nu = 20.35)
\end{align*}

\[ P(\mu_1 > \mu_2) = 0.863 \]

\[ P(-0.157 < \mu_1 - \mu_2 < 0.508) = 0.95 \]
t(\(\mu_1 = 8.23, \sigma_1 = 0.2, \nu = 22.94\))

\[P(\mu_1 > \mu_2) = 0.99\]

\[P(0.043 < \mu_1 - \mu_2 < 0.506) = 0.95\] (sig)
\[ t(\mu_1 = 8.45, \sigma_1 = 0.24, \nu = 22.97) \]

\[ P(\mu_1 > \mu_2) = 1 \]

\[ P(0.223 < \mu_1 - \mu_2 < 0.758) = 0.95 \text{ (sig)} \]
t(\(\mu_1 = 7.93, \sigma_1 = 0.1, v = 25.13\))

P(\(\mu_1 > \mu_2\)) = 0.405

AFUB_097320 (I−12b)

A1160p+ (I−12b)

P(−0.191 < \(\mu_1 - \mu_2\) < 0.149) = 0.95
\[ t(\mu_1 = 8.12, \sigma_1 = 0.18, \nu = 20.49) \]

\[ P(\mu_1 > \mu_2) = 0.939 \]

\[ P(-0.053 < \mu_1 - \mu_2 < 0.39) = 0.95 \]
\( t(\mu_1 = 7.67, \sigma_1 = 0.09, \nu = 25.4) \)

\( P(\mu_1 > \mu_2) = 0.001 \)

\( P(-0.445 < \mu_1 - \mu_2 < -0.115) = 0.95 \) (sig)

\( t(\mu_2 = 7.95, \sigma_2 = 0.15, \nu = 25.4) \)
\[ t(\mu_1 = 8.08, \sigma_1 = 0.06, \nu = 25.76) \]

\[ P(\mu_1 > \mu_2) = 0.958 \]

\[ t(\mu_2 = 7.95, \sigma_2 = 0.15, \nu = 25.76) \]

\[ P(-0.021 < \mu_1 - \mu_2 < 0.285) = 0.95 \]
\[ t(\mu_1 = 8.08, \sigma_1 = 0.1, \nu = 25.2) \]

\[ P(\mu_1 > \mu_2) = 0.937 \]

\[ P(-0.042 < \mu_1 - \mu_2 < 0.299) = 0.95 \]
\( t(\mu_1 = 7.78, \sigma_1 = 0.15, \nu = 24.4) \)

\[ P(\mu_1 > \mu_2) = 0.041 \]

\( t(\mu_2 = 7.95, \sigma_2 = 0.15, \nu = 24.4) \)

\[ P(-0.377 < \mu_1 - \mu_2 < 0.022) = 0.95 \]
$$t(\mu_1 = 7.99, \sigma_1 = 0.19, \nu = 21.61)$$

$$P(\mu_1 > \mu_2) = 0.637$$

$$P(-0.178 < \mu_1 - \mu_2 < 0.272) = 0.95$$
\[ t(\mu_1 = 8.08, \sigma_1 = 0.23, \nu = 12.06) \]

\[ P(\mu_1 > \mu_2) = 0.242 \]

\[ P(-0.421 < \mu_1 - \mu_2 < 0.223) = 0.95 \]
\( t(\mu_1 = 7.84, \sigma_1 = 0.14, \nu = 17.78) \)

\[ P(\mu_1 > \mu_2) = 0.005 \]

\( t(\mu_2 = 8.2, \sigma_2 = 0.25, \nu = 17.78) \)

\[ P(-0.625 < \mu_1 - \mu_2 < -0.096) = 0.95 \text{ (sig)} \]
\[ t(\mu_1 = 7.76, \sigma_1 = 0.1, \nu = 16.89) \]

\[ P(\mu_1 > \mu_2) = 0.001 \]

\[ t(\mu_2 = 8.2, \sigma_2 = 0.25, \nu = 16.89) \]

\[ P( -0.686 < \mu_1 - \mu_2 < -0.196 ) = 0.95 \] (sig)
P(μ₁ > μ₂) = 0.51

P(−0.39 < μ₁ − μ₂ < 0.396) = 0.95
\( t(\mu_1 = 5.74, \sigma_1 = 0.06, \nu = 0.74) \)

\( P(\mu_1 > \mu_2) = 0 \)

\( P(-2.65 < \mu_1 - \mu_2 < -2.176) = 0.95 \text{ (sig)} \)

\( t(\mu_2 = 8.15, \sigma_2 = 0.14, \nu = 0.74) \)
P(\mu_1 > \mu_2) = 0.78

AFUB_001960 (I−12c)

A1160p+ (I−12c)
$t(\mu_1 = 7.87, \sigma_1 = 0.31, \nu = 10.82)$

$P(\mu_1 > \mu_2) = 0.051$

$\mu_{diff}$

Frequency

$P(-0.716 < \mu_1 - \mu_2 < 0.063) = 0.95$

AFUB_002050 (I-12c)

A1160p+ (I-12c)
$$t(\mu_1 = 8.57, \sigma_1 = 0.06, \nu = 19.43)$$

$$P(\mu_1 > \mu_2) = 0.997$$

$$P(0.133 < \mu_1 - \mu_2 < 0.607) = 0.95$$ (sig)
\[ t(\mu_1 = 8.11, \sigma_1 = 0.18, \nu = 18.05) \]

\[ P(\mu_1 > \mu_2) = 0.269 \]

\[ P(-0.36 < \mu_1 - \mu_2 < 0.201) = 0.95 \]
\[ t(\mu_1 = 7.88, \sigma_1 = 0.2, \nu = 21.34) \]

\[ P(\mu_1 > \mu_2) = 0.002 \]

\[ P(-0.719 < \mu_1 - \mu_2 < -0.165) = 0.95 \text{ (sig)} \]
\[ t(\mu_1 = 8.23, \sigma_1 = 0.17, \nu = 21.51) \]

\[ P(\mu_1 > \mu_2) = 0.239 \]

\[ P(-0.352 < \mu_1 - \mu_2 < 0.17) = 0.95 \]
\( t(\mu_1 = 8.18, \sigma_1 = 0.14, \nu = 19.34) \)

\[ P(\mu_1 > \mu_2) = 0.112 \]

\[ P(-0.377 < \mu_1 - \mu_2 < 0.102) = 0.95 \]
$t(\mu_1 = 8.5, \sigma_1 = 0.1, \nu = 20.68)$

$P(\mu_1 > \mu_2) = 0.943$

$P(-0.048 < \mu_1 - \mu_2 < 0.402) = 0.95$
$$t(\mu_1 = 8.18, \sigma_1 = 0.15, \nu = 21.56)$$

$$P(\mu_1 > \mu_2) = 0.134$$

$$P(-0.381 < \mu_1 - \mu_2 < 0.113) = 0.95$$

$$t(\mu_2 = 8.32, \sigma_2 = 0.22, \nu = 21.56)$$
The t-distribution is as follows:

\[ t(\mu_1 = 8.48, \sigma_1 = 0.16, \nu = 20.33) \]

The probability that \( \mu_1 > \mu_2 \) is 0.907.

The probability that \(-0.088 < \mu_1 - \mu_2 < 0.416\) is 0.95.

AFUB_010720 (I−13a)

A1160p+ (I−13a)
$t(\mu_1 = 8.21, \sigma_1 = 0.2, \nu = 22.19)$

$P(\mu_1 > \mu_2) = 0.2$

$P(-0.381 < \bar{\mu}_1 - \bar{\mu}_2 < 0.166) = 0.95$
\[ t(\mu_1 = 8.2, \sigma_1 = 0.16, \nu = 22.31) \]

\[ P(\mu_1 > \mu_2) = 0.179 \]

\[ P(-0.368 < \mu_1 - \mu_2 < 0.135) = 0.95 \]

A1160p+(I-13a)

AFUB_015210 (I-13a)
\( P(\mu_1 > \mu_2) = 0.561 \)

\( P(-0.286 < \mu_1 - \mu_2 < 0.329) = 0.95 \)

\( t(\mu_1 = 8.34, \sigma_1 = 0.25, \nu = 21) \)

\( t(\mu_2 = 8.32, \sigma_2 = 0.22, \nu = 21) \)
$t(\mu_1 = 8.55, \sigma_1 = 0.21, \nu = 22.1)$

$P(\mu_1 > \mu_2) = 0.951$

$P(-0.046 < \mu_1 - \mu_2 < 0.506) = 0.95$
\[ t(\mu_1 = 8.37, \sigma_1 = 0.24, \nu = 21.11) \]

\[ P(\mu_1 > \mu_2) = 0.642 \]

\[ P(-0.24 < \mu_1 - \mu_2 < 0.36) = 0.95 \]

\[ t(\mu_2 = 8.32, \sigma_2 = 0.22, \nu = 21.11) \]
\( t(\mu_1 = 8.08, \sigma_1 = 0.19, \nu = 2.17) \)

\[
P(\mu_1 > \mu_2) = 0.001
\]

\[
P(-1.05 < \mu_1 - \mu_2 < -0.338) = 0.95 \text{ (sig)}
\]
\( t(\mu_1 = 7.97, \sigma_1 = 0.26, \nu = 8.6) \)

\[ P(\mu_1 > \mu_2) = 0 \]

\[ \mu_{\text{diff}} \]

Frequency

-1.5
-1.0
-0.5
0.0

7.5
8.0
8.5
9.0
9.5

\[ P(-1.185 < \mu_1 - \mu_2 < -0.425) = 0.95 \text{ (sig)} \]

AFUB_025190 (I−13b)

A1160p+ (I−13b)

\( t(\mu_2 = 8.78, \sigma_2 = 0.26, \nu = 8.6) \)
\[ t(\mu_1 = 8.48, \sigma_1 = 0.24, \nu = 13.75) \]

\[ P(\mu_1 > \mu_2) = 0.04 \]

\[ P(-0.65 < \mu_1 - \mu_2 < 0.042) = 0.95 \]
\( t(\mu_1 = 8.1, \sigma_1 = 0.14, \nu = 19.12) \)

\[
P(\mu_1 > \mu_2) = 0
\]

\[
\text{AFUB_027200 (I-13b)}
\]

\[
P(-0.967 < \mu_1 - \mu_2 < -0.385) = 0.95 \text{ (sig)}
\]
\( \mu_1 = 8.21, \sigma_1 = 0.37, \nu = 9.43 \)

\( P(\mu_1 > \mu_2) = 0.011 \)

\( P(-1.062 < \mu_1 - \mu_2 < -0.098) = 0.95 \) (sig)
\[ t(\mu_1 = 8.02, \sigma_1 = 0.24, \nu = 1.6) \]

\[ P(\mu_1 > \mu_2) = 0.006 \]

\[ P(-1.186 < \mu_1 - \mu_2 < -0.228) = 0.95 \text{ (sig)} \]
\[ t(\mu_1 = 8.31, \sigma_1 = 0.29, \nu = 13.61) \]

\[ P(\mu_1 > \mu_2) = 0.011 \]

\[ P(-0.863 < \mu_1 - \mu_2 < -0.09) = 0.95 \text{ (sig)} \]
\[ t(\mu_1 = 8.58, \sigma_1 = 0.25, \nu = 16.31) \]

\[ P(\mu_1 > \mu_2) = 0.126 \]

\[ P(-0.56 < \mu_1 - \mu_2 < 0.159) = 0.95 \]
\[ t(\mu_1 = 8.45, \sigma_1 = 0.27, \nu = 2.44) \]

\[ P(\mu_1 > \mu_2) = 0.06 \]

\[ P(-0.737 < \mu_1 - \mu_2 < 0.09) = 0.95 \]
\( t(\mu_1 = 7.93, \sigma_1 = 0.18, \nu = 17.96) \)

\[
P(\mu_1 > \mu_2) = 0
\]

\[
P(-1.164 < \mu_1 - \mu_2 < -0.55) = 0.95 \text{ (sig)}
\]

\( t(\mu_2 = 8.78, \sigma_2 = 0.28, \nu = 17.96) \)
\[ t(\mu_1 = 8.71, \sigma_1 = 0.26, \nu = 16.57) \]

\[ P(\mu_1 > \mu_2) = 0.332 \]

\[ P(-0.454 < \mu_1 - \mu_2 < 0.272) = 0.95 \]
\( t(\mu_1 = 8.01, \sigma_1 = 0.08, \nu = 18.63) \)

\[ P(\mu_1 > \mu_2) = 0 \]

\[ P(-1.048 < \mu_1 - \mu_2 < -0.507) = 0.95 \text{ (sig)} \]

\( (\sigma_1) \)

\( (\nu) \)

AFUB_048230 (I-13b)

\( A1160p+ (I-13b) \)
\( \nu_1 = 8.12, \sigma_1 = 0.13, \nu = 12.54 \) 

\[ P( \mu_1 > \mu_2 ) = 0.081 \]

\( \nu_2 = 8.29, \sigma_2 = 0.22, \nu = 12.54 \) 

\[ P( -0.415 < \mu_1 - \mu_2 < 0.074 ) = 0.95 \]
$P(\mu_1 > \mu_2) = 0.188$

$P(-0.336 < \mu_1 - \mu_2 < 0.133) = 0.95$
\[t(\mu_1 = 8.47, \sigma_1 = 0.16, \nu = 10.71)\]

\[P(\mu_1 > \mu_2) = 0.922\]

\[P(-0.076 < \mu_1 - \mu_2 < 0.45) = 0.95\]

\[t(\mu_2 = 8.28, \sigma_2 = 0.21, \nu = 10.71)\]
\[ t(\mu_1 = 8.56, \sigma_1 = 0.08, \nu = 10.32) \]

\[ P(\mu_1 > \mu_2) = 0.986 \]

\[ P(0.051 < \mu_1 - \mu_2 < 0.499) = 0.95 \text{ (sig)} \]
$t(\mu_1 = 8.67, \sigma_1 = 0.26, \nu = 4.47)$

$P(\mu_1 > \mu_2) = 0.99$

$P(0.064 < \mu_1 - \mu_2 < 0.74) = 0.95$ (sig)
\[ t( \mu_1 = 8.25, \sigma_1 = 0.23, \nu = 4.05 ) \]

\[ P( \mu_1 > \mu_2 ) = 0.476 \]

\[ A_{1160\text{p}+} (I-13c) \]

\[ \text{AFUB}_067440 (I-13c) \]

\[ P( -0.325 < \mu_1 - \mu_2 < 0.283 ) = 0.95 \]
\( t(\mu_1 = 8.48, \sigma_1 = 0.18, \nu = 8.45) \)

\[ P(\mu_1 > \mu_2) = 0.935 \]

\[ P(-0.063 < \mu_1 - \mu_2 < 0.476) = 0.95 \]

\( t(\mu_2 = 8.28, \sigma_2 = 0.21, \nu = 8.45) \)
\[ t(\mu_1 = 8.29, \sigma_1 = 0.22, \nu = 25.23) \]

\[ P(\mu_1 > \mu_2) = 0.541 \]

\[ P(-0.195 < \mu_1 - \mu_2 < 0.226) = 0.95 \]

\[ t(\mu_2 = 8.28, \sigma_2 = 0.06, \nu = 25.23) \]
$t(\mu_1 = 8.5, \sigma_1 = 0.37, \nu = 14.24)$

$P(\mu_1 > \mu_2) = 0.847$

$P(-0.165 < \mu_1 - \mu_2 < 0.618) = 0.95$
\( P(\mu_1 > \mu_2) = 0.996 \)

\( t(\mu_1 = 8.58, \sigma_1 = 0.22, \nu = 23.16) \)

\( P(0.084 < \mu_1 - \mu_2 < 0.512) = 0.95 \) (sig)
$t(\mu_1 = 9.02, \sigma_1 = 0.46, \nu = 18.09)$

$P(\mu_1 > \mu_2) = 0.998$

$P(0.267 < \mu_1 - \mu_2 < 1.214) = 0.95$ (sig)
\[ t(\mu_1 = 8.67, \sigma_1 = 0.22, \nu = 25.96) \]

\[ P(\mu_1 > \mu_2) = 1 \]

\[ P(0.187 < \mu_1 - \mu_2 < 0.598) = 0.95 \text{ (sig)} \]
\( t(\mu_1 = 8.35, \sigma_1 = 0.29, \nu = 20.74) \)

\[ P(\mu_1 > \mu_2) = 0.683 \]

\( P(-0.214 < \mu_1 - \mu_2 < 0.351) = 0.95 \)
\[ t(\mu_1 = 8.19, \sigma_1 = 0.13, \nu = 26.38) \]

\[ P(\mu_1 > \mu_2) = 0.091 \]

\[ P(-0.229 < \mu_1 - \mu_2 < 0.05) = 0.95 \]
\( t(\mu_1 = 8.02, \sigma_1 = 0.13, \nu = 26.49) \)

\[ P(\mu_1 > \mu_2) = 0.001 \]

\[ P(-0.391 < \mu_1 - \mu_2 < -0.118) = 0.95 \text{ (sig)} \]

\( t(\mu_2 = 8.28, \sigma_2 = 0.06, \nu = 26.49) \)
$t(\mu_1 = 8.31, \sigma_1 = 0.19, \nu = 25.21)$

$P(\mu_1 > \mu_2) = 0.648$

$P(-0.148 < \mu_1 - \mu_2 < 0.223) = 0.95$
\( t(\mu_1 = 8.24, \sigma_1 = 0.31, \nu = 2.91) \)

\[ P(\mu_1 > \mu_2) = 0.375 \]

\[ P(-0.41 < \mu_1 - \mu_2 < 0.47) = 0.95 \]
\[ P(\mu_1 > \mu_2) = 0 \]

\[ P(-0.651 < \mu_1 - \mu_2 < -0.364) = 0.95 \text{ (sig)} \]
$P(\mu_1 > \mu_2) = 0$

$P(-0.479 < \mu_1 - \mu_2 < -0.193) = 0.95$ (sig)
\[ t(\mu_1 = 8.11, \sigma_1 = 0.2, \nu = 20.37) \]

\[ P(\mu_1 > \mu_2) = 0 \]

\[ P(-0.83 < \mu_1 - \mu_2 < -0.245) = 0.95 \text{ (sig)} \]
$t(\mu_1 = 8.24, \sigma_1 = 0.13, \nu = 22.4)$

$P(\mu_1 > \mu_2) = 0.002$

$P(\mu_1 - \mu_2 < -0.148) = 0.95$ (sig)
\( t(\mu_1 = 8.14, \sigma_1 = 0.1, \nu = 23.09) \)

\( P(\mu_1 > \mu_2) = 0 \)

\( P(-0.748 < \mu_1 - \mu_2 < -0.259) = 0.95 \) (sig)

\( t(\mu_2 = 8.64, \sigma_2 = 0.24, \nu = 23.09) \)
\[ t(\mu_1 = 7.86, \sigma_1 = 0.21, \nu = 21) \]

\[ P(\mu_1 > \mu_2) = 0 \]

\[ P(-1.081 < \mu_1 - \mu_2 < -0.487) = 0.95 \text{ (sig)} \]
\[ t(\mu_1 = 8.66, \sigma_1 = 0.23, \nu = 20.22) \]

\[ P(\mu_1 > \mu_2) = 0.545 \]

\[ P(-0.29 < \mu_1 - \mu_2 < 0.327) = 0.95 \]
\[ t(\mu_1 = 8.39, \sigma_1 = 0.12, \nu = 19.02) \]

\[ P(\mu_1 > \mu_2) = 0.022 \]

\[ P(-0.508 < \mu_1 - \mu_2 < -0.005) = 0.95 \text{ (sig)} \]
\[ P(\mu_1 > \mu_2) = 0.73 \]

\[ P(-0.25 < \mu_1 - \mu_2 < 0.48) = 0.95 \]
\( t(\mu_1 = 8.74, \sigma_1 = 0.29, \nu = 15.17) \)

\[
\begin{align*}
&P(\mu_1 > \mu_2) = 0.732 \\
&P(-0.263 < \mu_1 - \mu_2 < 0.465) = 0.95
\end{align*}
\]

AFUB_004120 (I−14b)

\( t(\mu_2 = 8.63, \sigma_2 = 0.23, \nu = 15.17) \)
\[ t(\mu_1 = 8.86, \sigma_1 = 0.24, \nu = 17.49) \]

\[ P(\mu_1 > \mu_2) = 0.916 \]

\[ P(-0.113 < \mu_1 - \mu_2 < 0.529) = 0.95 \]
\[ t(\mu_1 = 8.57, \sigma_1 = 0.17, \nu = 19.79) \]

\[ P(\mu_1 > \mu_2) = 0.291 \]

\[ P(-0.347 < \mu_1 - \mu_2 < 0.2) = 0.95 \]
\( t(\mu_1 = 8.45, \sigma_1 = 0.27, \nu = 16.09) \)

\[ P(\mu_1 > \mu_2) = 0.142 \]

\[ P(-0.532 < \mu_1 - \mu_2 < 0.165) = 0.95 \]

\( t(\mu_2 = 8.63, \sigma_2 = 0.23, \nu = 16.09) \)
\[ t(\mu_1 = 8.02, \sigma_1 = 0.12, \nu = 25.46) \]

\[ P(\mu_1 > \mu_2) = 0 \]

\[ P(-0.903 < \mu_1 - \mu_2 < -0.579) = 0.95 \text{ (sig)} \]
\[(\mu_1 = 9.1, \sigma_1 = 0.27, \nu = 22.95)\]

\[P(\mu_1 > \mu_2) = 0.991\]

\[P(0.067 < \mu_1 - \mu_2 < 0.619) = 0.95\] (sig)
$t(\mu_1 = 8.62, \sigma_1 = 0.33, \nu = 18.89)$

$P(\mu_1 > \mu_2) = 0.193$

$P(-0.47 < \mu_1 - \mu_2 < 0.191) = 0.95$
$t(\mu_1 = 8.28, \sigma_1 = 0.17, \nu = 24.29)$

$P(\mu_1 > \mu_2) = 0$

$P(-0.68 < \mu_1 - \mu_2 < -0.289) = 0.95$ (sig)
$t(\mu_1 = 8.39, \sigma_1 = 0.15, \nu = 25.6)$

$P(\mu_1 > \mu_2) = 0$

$P(-0.555 < \mu_1 - \mu_2 < -0.194) = 0.95$ (sig)
\( P(\mu_1 > \mu_2) = 0.854 \)

\( P(-0.18 < \mu_1 - \mu_2 < 0.563) = 0.95 \)

\( t(\mu_1 = 8.95, \sigma_1 = 0.37, \nu = 15.89) \)

\( t(\mu_2 = 8.76, \sigma_2 = 0.12, \nu = 15.89) \)
\[ t(\mu_1 = 8.27, \sigma_1 = 0.15, \nu = 24.52) \]

\[ P(\mu_1 > \mu_2) = 0 \]

\[ P(-0.669 < \mu_1 - \mu_2 < -0.312) = 0.95 \text{ (sig)} \]
\[ t(\mu_1 = 8.81, \sigma_1 = 0.32, \nu = 14.48) \]

\[ P(\mu_1 > \mu_2) = 0.61 \]

\[ P(-0.308 < \mu_1 - \mu_2 < 0.381) = 0.95 \]
\begin{align*}
t(\mu_1 = 9.57, \sigma_1 = 0.37, \nu = 19.73) \\
P(\mu_1 > \mu_2) = 1 \\
P(0.436 < \mu_1 - \mu_2 < 1.183) = 0.95 \text{ (sig)}
\end{align*}
\( t(\mu_1 = 8.7, \sigma_1 = 0.16, \nu = 18.97) \)

\[ P(\mu_1 > \mu_2) = 0.25 \]

\[ P( -0.244 < \mu_1 - \mu_2 < 0.139 ) = 0.95 \]
$t(\mu_1 = 8.47, \sigma_1 = 0.19, \nu = 19.96)$

$P(\mu_1 > \mu_2) = 0.006$

$P(-0.504 < \mu_1 - \mu_2 < -0.071) = 0.95$ (sig)
\[ t(\mu_1 = 7.54, \sigma_1 = 0.26, \nu = 23.04) \]

\[ P(\mu_1 > \mu_2) = 0 \]

\[ P(-0.944 < \mu_1 - \mu_2 < -0.306) = 0.95 \text{ (sig)} \]
\[ t(\mu_1 = 8.04, \sigma_1 = 0.13, \nu = 23.64) \]

\[ P(\mu_1 > \mu_2) = 0.141 \]

\[ P(-0.356 < \mu_1 - \mu_2 < 0.105) = 0.95 \]

AFUB_064180 (l−14d)

A1160p+ (l−14d)
t(\mu_1 = 8.01, \sigma_1 = 0.24, \nu = 22.53)

P(\mu_1 > \mu_2) = 0.153

AFUB_067480 (I-14d)

P(-0.457 < \mu_1 - \mu_2 < 0.145) = 0.95
\( t(\mu_1 = 7.84, \sigma_1 = 0.09, \nu = 23.71) \)

\[ P(\mu_1 > \mu_2) = 0.003 \]

\[ P(-0.536 < \mu_1 - \mu_2 < -0.104) = 0.95 \text{ (sig)} \]
\[ t(\mu_1 = 8.09, \sigma_1 = 0.23, \nu = 19.99) \]

\[ P(\mu_1 > \mu_2) = 0.321 \]

\[ P(-0.355 < \mu_1 - \mu_2 < 0.229) = 0.95 \]
\( t(\mu_1 = 8.26, \sigma_1 = 0.18, \nu = 24.28) \)

\( P(\mu_1 > \mu_2) = 0.784 \)

\( P(-0.155 < \mu_1 - \mu_2 < 0.369) = 0.95 \)
$t(\mu_1 = 7.68, \sigma_1 = 0.05, \nu = 23.97) \quad t(\mu_2 = 8.16, \sigma_2 = 0.21, \nu = 23.97)$

$P(\mu_1 > \mu_2) = 0$

$P(-0.683 < \mu_1 - \mu_2 < -0.273) = 0.95$ (sig)
\[ t(\mu_1 = 7.28, \sigma_1 = 0.2, \nu = 21.78) \]

\[ P(\mu_1 > \mu_2) = 0.003 \]

\[ P(-0.669 < \mu_1 - \mu_2 < -0.139) = 0.95 \text{ (sig)} \]
\( t(\mu_1 = 7.64, \sigma_1 = 0.24, \nu = 20.81) \)

\[ P(\mu_1 > \mu_2) = 0.374 \]

\[ P(-0.329 < \mu_1 - \mu_2 < 0.24) = 0.95 \]
\begin{align*}
\text{t}(\mu_1 &= 7.73, \sigma_1 = 0.16, \nu = 23.82) \\
P(\mu_1 > \mu_2) &= 0.665 \\
\text{AFUB_077190 (I-15a)} \\
P(-0.193 < \mu_1 - \mu_2 < 0.282) &= 0.95
\end{align*}
\[ t(\mu_1 = 8.03, \sigma_1 = 0.15, \nu = 18.06) \]

\[ P(\mu_1 > \mu_2) = 0.998 \]

\[ P(0.12 < \mu_1 - \mu_2 < 0.594) = 0.95 \] (sig)
$t(\mu_1 = 7.97, \sigma_1 = 0.36, \nu = 16.53)$

$P(\mu_1 > \mu_2) = 0.912$

$P(-0.133 < \mu_1 - \mu_2 < 0.688) = 0.95$

$\text{AFUB_082490 (I-15a)}$

$\text{A1160p+ (I-15a)}$
**Diagram Description:**

The diagram illustrates a statistical hypothesis test comparing two means, \( \mu_1 \) and \( \mu_2 \), from two different distributions. The test involves a t-distribution with parameters \( \mu_1 = 8.17, \sigma_1 = 0.22, \nu = 22.07 \) and \( \mu_2 = 7.68, \sigma_2 = 0.2, \nu = 22.07 \).

- **Top Section:**
  - The red line represents a t-distribution with the given parameters, indicating a significant result with a p-value of \( P(\mu_1 > \mu_2) = 0.999 \).
  - The asterisks (*) indicate significant differences at different confidence levels.

- **Bottom Section:**
  - The blue graph shows a histogram with a normal distribution curve, indicating a p-value of \( P(0.222 < \mu_1 - \mu_2 < 0.771) = 0.95 \) (sig), suggesting a high confidence in the difference between the means.

**Statistical Notations:**

- **t(\( \mu_1 = 8.17, \sigma_1 = 0.22, \nu = 22.07 \))**
- **t(\( \mu_2 = 7.68, \sigma_2 = 0.2, \nu = 22.07 \))**

**Graph Details:**

- The x-axis represents the variable AFUB_083250 (I-15a).
- The y-axis represents the variable A1160+ (I-15a).
- The graph includes a scatter plot with a normal distribution curve overlay, highlighting the significance of the difference between the two means.
\[ t(\mu_1 = 8.13, \sigma_1 = 0.31, \nu = 20.63) \]

\[ P(\mu_1 > \mu_2) = 0.993 \]

\[ P(0.099 < \mu_1 - \mu_2 < 0.791) = 0.95 \text{ (sig)} \]
\( t(\mu_1 = 7.68, \sigma_1 = 0.16, \nu = 23.1) \)

\[ P(\mu_1 > \mu_2) = 0.51 \]

\[ P( -0.237 < \mu_1 - \mu_2 < 0.239 ) = 0.95 \]
\[ t(\mu_1 = 7.51, \sigma_1 = 0.2, \nu = 22.85) \]

\[ P(\mu_1 > \mu_2) = 0.094 \]

\[ P(-0.44 < \mu_1 - \mu_2 < 0.092) = 0.95 \]
$$t(\mu_1 = 7.65, \sigma_1 = 0.25, \nu = 21.51)$$

$$P(\mu_1 > \mu_2) = 0.408$$

$$P(-0.337 < \mu_1 - \mu_2 < 0.264) = 0.95$$

$$t(\mu_2 = 7.68, \sigma_2 = 0.2, \nu = 21.51)$$
\[ t(\mu_1 = 7.35, \sigma_1 = 0.13, \nu = 24.49) \]

\[ P(\mu_1 > \mu_2) = 0.003 \]

\[ P(-0.542 < \mu_1 - \mu_2 < -0.105) = 0.95 \textit{(sig)} \]
\( t(\mu_1 = 8.18, \sigma_1 = 0.33, \nu = 11.8) \)

\[ P(\mu_1 > \mu_2) = 0.998 \]

\[ P(0.221 < \mu_1 - \mu_2 < 0.936) = 0.95 \text{ (sig)} \]
\[ t(\mu_1 = 7.76, \sigma_1 = 0.27, \nu = 11.66) \]

\[ P(\mu_1 > \mu_2) = 0.813 \]

\[ P(-0.173 < \mu_1 - \mu_2 < 0.487) = 0.95 \]

\[ t(\mu_2 = 7.6, \sigma_2 = 0.15, \nu = 11.66) \]
\( t(\mu_1 = 8.04, \sigma_1 = 0.15, \nu = 20.66) \)

\( P(\mu_1 > \mu_2) = 0.95 \) (sig)

\( P(0.226 < \mu_1 - \mu_2 < 0.632) = 0.95 \) (sig)
\[ t(\mu_1 = 7.57, \sigma_1 = 0.1, \nu = 21.39) \]

\[ P(\mu_1 > \mu_2) = 0.308 \]

\[ t(\mu_2 = 7.61, \sigma_2 = 0.16, \nu = 21.39) \]

\[ P(-0.222 < \mu_1 - \mu_2 < 0.129) = 0.95 \]
t(μ₁ = 7.84, σ₁ = 0.15, ν = 19.3)

P(μ₁ > μ₂) = 0.983

AFUB_096690 (I-15b)

A1160p+ (I-15b)

P(0.026 < μ₁ - μ₂ < 0.442) = 0.95 (sig)
\[
\begin{align*}
\mu_1 &= 7.53, \quad \sigma_1 = 0.14, \quad \nu = 20.3 \\
\mu_2 &= 7.61, \quad \sigma_2 = 0.16, \quad \nu = 20.3 \\
\end{align*}
\]

\[
P(\mu_1 > \mu_2) = 0.208
\]

\[
P(-0.288 < \mu_1 - \mu_2 < 0.116) = 0.95
\]
t(\(\mu_1 = 7.62\), \(\sigma_1 = 0.2\), \(\nu = 19.36\))

\[
P(\mu_1 > \mu_2) = 0.524
\]

\[
P(-0.224 < \mu_1 - \mu_2 < 0.247) = 0.95
\]
t(\mu_1 = 7.72, \sigma_1 = 0.12, \nu = 21.12)

P(\mu_1 > \mu_2) = 0.888

AFUB_016450 (I−15b)

P(−0.078 < \mu_1 - \mu_2 < 0.289) = 0.95
t(\(\mu_1 = 7.81, \sigma_1 = 0.2, \nu = 14.83\))

\[ P(\mu_1 > \mu_2) = 0.96 \]

\[ P(-0.032 < \bar{\mu}_1 - \bar{\mu}_2 < 0.442) = 0.95 \]
\[ t(\mu_1 = 7.61, \sigma_1 = 0.18, \nu = 19.94) \]

\[ P(\mu_1 > \mu_2) = 0.502 \]

\[ P(-0.228 < \mu_1 - \mu_2 < 0.224) = 0.95 \]
\[ t(\mu_1 = 7.81, \sigma_1 = 0.08, \nu = 21.52) \]

\[ P(\mu_1 > \mu_2) = 0.986 \]

\[ P(0.028 < \mu_1 - \mu_2 < 0.361) = 0.95 \text{ (sig)} \]
\[ \text{t(} \mu_1 = 7.49 , \sigma_1 = 0.12 , \nu = 20.74 \text{)} \]

\[ P(\mu_1 > \mu_2) = 0.006 \]

\[ P(-0.371 < \mu_1 - \mu_2 < -0.057) = 0.95 \text{ (sig)} \]
\[ t(\mu_1 = 7.8, \sigma_1 = 0.16, \nu = 23.42) \]

\[ P(\mu_1 > \mu_2) = 0.839 \]

\[ P(-0.096 < \mu_1 - \mu_2 < 0.272) = 0.95 \]
$t(\mu_1 = 7.92, \sigma_1 = 0.21, \nu = 23.19)$

$P(\mu_1 > \mu_2) = 0.971$

$P(-0.004 < \mu_1 - \mu_2 < 0.434) = 0.95$
\[ t(\mu_1 = 7.95, \sigma_1 = 0.14, \nu = 23.88) \]

\[ P(\mu_1 > \mu_2) = 0.996 \]

\[ P(0.074 < \mu_1 - \mu_2 < 0.412) = 0.95 \text{ (sig)} \]
$t(\mu_1 = 7.88, \sigma_1 = 0.24, \nu = 21.09)$

$P(\mu_1 > \mu_2) = 0.91$

$P(-0.081 < \mu_1 - \mu_2 < 0.428) = 0.95$
\[ t(\mu_1 = 7.82, \sigma_1 = 0.21, \nu = 8.09) \]

\[ P(\mu_1 > \mu_2) = 0.86 \]

\[ P(\mu_1 - \mu_2 < 0.354) = 0.95 \]
$t(\mu_1 = 7.9, \sigma_1 = 0.26, \nu = 18.39)$

$P(\mu_1 > \mu_2) = 0.925$

$P(-0.069 < \mu_1 - \mu_2 < 0.476) = 0.95$
$t(\mu_1 = 7.9, \sigma_1 = 0.17, \nu = 23.42)$

$P(\mu_1 > \mu_2) = 0.979$

$P(0.004 < \mu_1 - \mu_2 < 0.374) = 0.95$ (sig)
\( t(\mu_1 = 8.16, \sigma_1 = 0.21, \nu = 24.07) \)

\[ P(\mu_1 > \mu_2) = 1 \]

\( t(\mu_2 = 7.71, \sigma_2 = 0.11, \nu = 24.07) \)

\[ P(0.223 < \mu_1 - \mu_2 < 0.673) = 0.95 \text{ (sig)} \]

AFUB_007880 (I−15c)

A1160p+ (I−15c)
$t(\mu_1 = 8.2, \sigma_1 = 0.14, \nu = 24.81)$

$P(\mu_1 > \mu_2) = 1$

$P(0.324 < \mu_1 - \mu_2 < 0.665) = 0.95$ (sig)
$t(\mu_1 = 8.07, \sigma_1 = 0.33, \nu = 18.73)$

$P(\mu_1 > \mu_2) = 0.984$

$P(0.04 < \mu_1 - \mu_2 < 0.695) = 0.95$ (sig)
\( t(\mu_1 = 6.83, \sigma_1 = 0.09, \nu = 15.48) \)

\( P(\mu_1 > \mu_2) = 0 \)

\( P(-1.227 < \mu_1 - \mu_2 < -0.795) = 0.95 \) (sig)
t(\(\mu_1 = 7.87, \sigma_1 = 0.24, \nu = 11.13\))

\[ P(\mu_1 > \mu_2) = 0.63 \]

\[ P(-0.245 < \mu_1 - \mu_2 < 0.358) = 0.95 \]
$t(\mu_1 = 7.71, \sigma_1 = 0.19, v = 12.12)$

$P(\mu_1 > \mu_2) = 0.204$

$P(-0.372 < \mu_1 - \mu_2 < 0.17) = 0.95$
\[ t(\mu_1 = 8.11, \sigma_1 = 0.32, \nu = 7.67) \]

\[ P(\mu_1 > \mu_2) = 0.937 \]

\[ P(-0.09 < \mu_1 - \mu_2 < 0.703) = 0.95 \]

\[ t(\mu_2 = 7.81, \sigma_2 = 0.19, \nu = 7.67) \]
\( t(\mu_1 = 8.14, \sigma_1 = 0.23, \nu = 10.57) \)

\[
P(\mu_1 > \mu_2) = 0.974
\]

\[
P(0.006 < \mu_1 - \mu_2 < 0.628) = 0.95 \text{ (sig)}
\]
$t(\mu_1 = 7.79, \sigma_1 = 0.21, \nu = 11.82)$

$P(\mu_1 > \mu_2) = 0.422$

$P(-0.317 < \mu_1 - \mu_2 < 0.257) = 0.95$

$AFUB_042180 (I-15d)$

$A1160p+ (I-15d)$
\[ t(\mu_1 = 7.66, \sigma_1 = 0.11, \nu = 12.94) \]

\[ P(\mu_1 > \mu_2) = 0.061 \]

\[ P(-0.392 < \mu_1 - \mu_2 < 0.05) = 0.95 \]
\[ t(\mu_1 = 7.62, \sigma_1 = 0.2, \nu = 9.98) \]

\[ P(\mu_1 > \mu_2) = 0.065 \]

\[ P(-0.47 < \mu_1 - \mu_2 < 0.066) = 0.95 \]
\[ t(\mu_1 = 8.14, \sigma_1 = 0.14, \nu = 23.45) \]

\[ P(\mu_1 > \mu_2) = 0 \]

\[ \mu_{diff} \]

Frequency

\[ -2.8 \quad -2.4 \quad -2.0 \quad -1.6 \]

\[ 8 \quad 9 \quad 10 \quad 11 \]

\[ 8 \quad 9 \quad 10 \quad 11 \]

\[ -2.418 < \mu_1 - \mu_2 < -1.938 \]

\[ P(-2.418 < \mu_1 - \mu_2 < -1.938) = 0.95 \text{ (sig)} \]

\[ \mu_2 = 10.32, \sigma_2 = 0.21, \nu = 23.45 \]
$$P(\mu_1 > \mu_2) = 0$$

$$t(\mu_1 = 9.1, \sigma_1 = 0.29, \nu = 18.69)$$

$$P(-1.595 < \mu_1 - \mu_2 < -0.874) = 0.95 \text{ (sig)}$$

**AFUB_015440 (I-16a)**

**A1160p+ (I-16a)**
\[ t(\mu_1 = 8.96, \sigma_1 = 0.38, \nu = 13.99) \]

\[ P(\mu_1 > \mu_2) = 0 \]

\[ P(\mu_1 - \mu_2 < -0.909) = 0.95 \text{ (sig)} \]
\( t(\mu_1 = 8.93, \sigma_1 = 0.3, \nu = 20.75) \)

\[ P(\mu_1 > \mu_2) = 0 \]

\[ P( -1.741 < \mu_1 - \mu_2 < -1.046 ) = 0.95 \text{ (sig)} \]

\[ P( -1.741 < \mu_1 - \mu_2 < -1.046 ) = 0.95 \text{ (sig)} \]
\( t(\mu_1 = 8.66, \sigma_1 = 0.3, \nu = 19.58) \)

\[ P(\mu_1 > \mu_2) = 0 \]

\[ P(-2.011 < \mu_1 - \mu_2 < -1.309) = 0.95 \text{ (sig)} \]
\( t(\mu_1 = 8.83, \sigma_1 = 0.25, \nu = 22.22) \)

\[ P(\mu_1 > \mu_2) = 0 \]

\( t(\mu_2 = 10.32, \sigma_2 = 0.21, \nu = 22.22) \)

\[ P(-1.797 < \mu_1 - \mu_2 < -1.189) = 0.95 \text{ (sig)} \]
t(\(\mu_1 = 8.38, \sigma_1 = 0.22, \nu = 22.87\))

\[ P(\mu_1 > \mu_2) = 0 \]

AFUB_015990 (I−16a)

A1160p+ (I−16a)

\[ t(\mu_2 = 10.32, \sigma_2 = 0.21, \nu = 22.87) \]

\[ P(-2.231 < \mu_1 - \mu_2 < -1.661) = 0.95 \text{ (sig)} \]
$t(\mu_1 = 9.92, \sigma_1 = 0.26, \nu = 15.04)$

$P(\mu_1 > \mu_2) = 0.007$

$P(\mu_1 > \mu_2) = 0.007$

$P(\mu_1 > \mu_2) = 0.007$

$\text{AFUB_016220 (I−16a)}$

$\text{A1160p+ (I−16a)}$

$P(-0.726 < \mu_1 - \mu_2 < -0.091) = 0.95 \text{ (sig)}$
\[ t(\mu_1 = 9.1, \sigma_1 = 0.28, v = 19.51) \]

\[ P(\mu_1 > \mu_2) = 0 \]

\[ P(-1.556 < \mu_1 - \mu_2 < -0.892) = 0.95 \text{ (sig)} \]
\( t(\mu_1 = 8.61, \sigma_1 = 0.2, \nu = 21.58) \)

\[ P(\mu_1 > \mu_2) = 0 \]

\[ P(-1.992 < \mu_1 - \mu_2 < -1.447) = 0.95 \text{(sig)} \]

\( t(\mu_2 = 10.32, \sigma_2 = 0.21, \nu = 21.58) \)
\[ t(\mu_1 = 8.94, \sigma_1 = 0.35, \nu = 3.26) \]

\[ P(\mu_1 > \mu_2) = 0 \]

\[ t(\mu_2 = 10.35, \sigma_2 = 0.19, \nu = 3.26) \]

\[ P(-1.944 < \mu_1 - \mu_2 < -0.829) = 0.95 \text{ (sig)} \]
\( t(\mu_1 = 9.65, \sigma_1 = 0.3, \nu = 17.16) \)

\( P(\mu_1 > \mu_2) = 0 \)

\( P(-1.022 < \mu_1 - \mu_2 < -0.327) = 0.95 \) (sig)

AFUB_016730 (I-16a)

A1160p+ (I-16a)
\[ t(\mu_1 = 8.21, \sigma_1 = 0.29, \nu = 20.82) \]

\[ P(\mu_1 > \mu_2) = 0.004 \]

\[ P(-0.732 < \mu_1 - \mu_2 < -0.137) = 0.95 \text{ (sig)} \]

\[ t(\mu_2 = 8.64, \sigma_2 = 0.1, \nu = 20.82) \]
\[
\text{\textit{AFUB\_016820 (I-16b)}}
\]

\[
P(\mu_1 > \mu_2) = 0.27
\]

\[
P(-0.242 < \mu_1 - \mu_2 < 0.125) = 0.95
\]
$t(\mu_1 = 8.58, \sigma_1 = 0.19, \nu = 25.12)$

$P(\mu_1 > \mu_2) = 0.267$

$P(-0.257 < \mu_1 - \mu_2 < 0.138) = 0.95$
\( t\left(\mu_1 = 8.75, \sigma_1 = 0.12, \nu = 25.23\right) \)

\[ P(\mu_1 > \mu_2) = 0.926 \]

\[ P(-0.041 < \mu_1 - \mu_2 < 0.259) = 0.95 \]
\[ t(\mu_1 = 8.92, \sigma_1 = 0.12, \nu = 26.07) \]

\[ P(\mu_1 > \mu_2) = 0.999 \]

\[ t(\mu_2 = 8.64, \sigma_2 = 0.11, \nu = 26.07) \]

\[ P(0.124 < \mu_1 - \mu_2 < 0.424) = 0.95 \text{ (sig)} \]

AFUB_017410 (I−16b)

A1160p+ (I−16b)
$t(\mu_1 = 8.67, \sigma_1 = 0.07, \nu = 25.62)$

$P(\mu_1 > \mu_2) = 0.687$

$P(-0.093 < \mu_1 - \mu_2 < 0.146) = 0.95$
\( t(\mu_1 = 8.62, \sigma_1 = 0.16, \nu = 24.68) \)

\[ P(\mu_1 > \mu_2) = 0.401 \]

\[ P(-0.205 < \mu_1 - \mu_2 < 0.155) = 0.95 \]
\( t(\mu_1 = 8.55, \sigma_1 = 0.23, \nu = 24.37) \)

\[ P(\mu_1 > \mu_2) = 0.208 \]

\[ P(-0.326 < \mu_1 - \mu_2 < 0.141) = 0.95 \]

\( t(\mu_2 = 8.64, \sigma_2 = 0.11, \nu = 24.37) \)
\[ t(\mu_1 = 8.24, \sigma_1 = 0.19, \nu = 25.13) \]

\[ P(\mu_1 > \mu_2) = 0 \]

\[ P(-0.596 < \mu_1 - \mu_2 < -0.189) = 0.95 \text{ (sig)} \]
\[ t(\mu_1 = 8.09, \sigma_1 = 0.14, \nu = 25.59) \]

\[ P(\mu_1 > \mu_2) = 0 \]

\[ P(-0.725 < \mu_1 - \mu_2 < -0.39) = 0.95 \text{ (sig)} \]
$P(\mu_1 > \mu_2) = 0.916$

$P(-0.062 < \bar{\mu}_1 - \bar{\mu}_2 < 0.31) = 0.95$
\[ t(\mu_1 = 8.61, \sigma_1 = 0.26, \nu = 23.26) \]

\[ P(\mu_1 > \mu_2) = 0.394 \]

\[ t(\mu_2 = 8.64, \sigma_2 = 0.1, \nu = 23.26) \]

\[ P(-0.297 < \mu_1 - \mu_2 < 0.23) = 0.95 \]
$t(\mu_1 = 8.34, \sigma_1 = 0.33, \nu = 20.28)$

$P(\mu_1 > \mu_2) = 0.018$

$P(-0.691 < \mu_1 - \mu_2 < -0.016) = 0.95$ (sig)
\( t(\mu_1 = 8.68, \sigma_1 = 0.32, \nu = 17.92) \)

\[ P(\mu_1 > \mu_2) = 0.45 \]

\[ P(-0.371 < \mu_1 - \mu_2 < 0.331) = 0.95 \]
t(µ₁ = 8.16, σ₁ = 0.13, ν = 25.37)

P(µ₁ > µ₂) = 0

P(−0.728 < µ₁ − µ₂ < −0.347) = 0.95 (sig)
\[ P(\mu_1 > \mu_2) = 0.962 \]

\[ P(-0.022 < \mu_1 - \mu_2 < 0.422) = 0.95 \]
t(\mu_1 = 8.91, \sigma_1 = 0.18, \nu = 23.6)

P(\mu_1 > \mu_2) = 0.972

P(-0.001 < \mu_1 - \mu_2 < 0.441) = 0.95
\[ t(\mu_1 = 8.75, \sigma_1 = 0.29, \nu = 22.01) \]

\[ P(\mu_1 > \mu_2) = 0.641 \]

\[ P(-0.24 < \mu_1 - \mu_2 < 0.368) = 0.95 \]
\[ t(\mu_1 = 8.42, \sigma_1 = 0.18, \nu = 24.75) \]

\[ P(\mu_1 > \mu_2) = 0.009 \]

\[ P(-0.494 < \mu_1 - \mu_2 < -0.051) = 0.95 \text{ (sig)} \]
\( t(\mu_1 = 8.77, \sigma_1 = 0.23, \nu = 23.2) \)

\[ P(\mu_1 > \mu_2) = 0.709 \]

\[ P( -0.182 < \mu_1 - \mu_2 < 0.329 ) = 0.95 \]
\( t(\mu_1 = 7.36, \sigma_1 = 0.03, \nu = 26.55) \)

\[ P(\mu_1 > \mu_2) = 0 \]

\[ P(-0.382 < \mu_1 - \mu_2 < -0.22) = 0.95 \text{ (sig)} \]
\[ t(\mu_1 = 7.56, \sigma_1 = 0.15, \nu = 25.2) \]

\[ P(\mu_1 > \mu_2) = 0.086 \]

\[ P(-0.269 < \mu_1 - \mu_2 < 0.051) = 0.95 \]
\[ t(\mu_1 = 7.34, \sigma_1 = 0.1, \nu = 25.74) \]

\[ P(\mu_1 > \mu_2) = 0 \]

\[ \text{P}( -0.443 < \mu_1 - \mu_2 < -0.203 ) = 0.95 \text{ (sig)} \]
\[ t(\mu_1 = 7.87, \sigma_1 = 0.19, \nu = 24.94) \]

\[ P(\mu_1 > \mu_2) = 0.979 \]

\[ P(0.013 < \mu_1 - \mu_2 < 0.393) = 0.95 \text{ (sig)} \]
\[ t(\mu_1 = 7.8, \sigma_1 = 0.24, \nu = 25.32) \]

\[ P(\mu_1 > \mu_2) = 0.883 \]

\[ P(-0.097 < \mu_1 - \mu_2 < 0.374) = 0.95 \]
\( t(\mu_1 = 7.76, \sigma_1 = 0.11, \nu = 26.44) \)

\[ P(\mu_1 > \mu_2) = 0.939 \]

AFUB_087890 (I-17a)
$$t(\mu_1 = 7.96, \sigma_1 = 0.11, \nu = 26.39)$$

$$P(\mu_1 > \mu_2) = 1$$

$$P(0.166 < \mu_1 - \mu_2 < 0.427) = 0.95$$ (sig)
\( t(\mu_1 = 7.61, \sigma_1 = 0.17, \nu = 24.74) \)

- \( P(\mu_1 > \mu_2) = 0.245 \)

- \( t(\mu_2 = 7.66, \sigma_2 = 0.08, \nu = 24.74) \)

- \( P(-0.232 < \mu_1 - \mu_2 < 0.113) = 0.95 \)

AFUB_088380 (I-17a)

A1160p+ (I-17a)
\( t(\mu_1 = 7.77, \sigma_1 = 0.19, \nu = 24.44) \)

\[ P(\mu_1 > \mu_2) = 0.867 \]

\[ P(-0.085 < \mu_1 - \mu_2 < 0.3) = 0.95 \]
$t(\mu_1 = 7.43, \sigma_1 = 0.18, \nu = 25.25)$

$P(\mu_1 > \mu_2) = 0.009$

$P(-0.408 < \mu_1 - \mu_2 < -0.051) = 0.95$ (sig)
$P( \mu_1 > \mu_2 ) = 0.173$

$t(\mu_1 = 7.6, \sigma_1 = 0.12, \nu = 26.43)$

$P(-0.198 < \mu_1 - \mu_2 < 0.072) = 0.95$
\( t(\mu_1 = 7.45, \sigma_1 = 0.12, \nu = 25.62) \)

\[
P(\mu_1 > \mu_2) = 0.003
\]

\[
P(-0.352 < \mu_1 - \mu_2 < -0.08) = 0.95 \text{ (sig)}
\]

\[
A1160p+ (I-17a)
\]

\[
AFUB_021220 (I-17a)
\]
**Statistical Analysis**

The following statistical analysis and graphical representation illustrate the comparison of two distributions and the associated probabilities.

**Distribution 1**
- **Mean ($\mu_1$)**: 7.38
- **Standard Deviation ($\sigma_1$)**: 0.04
- **Degrees of Freedom ($\nu$)**: 25.44

**Distribution 2**
- **Mean ($\mu_2$)**: 8
- **Standard Deviation ($\sigma_2$)**: 0.15
- **Degrees of Freedom ($\nu$)**: 25.44

**Graphical Representation**
- The red line represents the distribution of $\mu_1$.
- The orange line represents the distribution of $\mu_2$.
- The asterisks indicate the critical values for the comparison.

**Probabilities**
- $P(\mu_1 > \mu_2) = 0$
- $P(-0.766 < \mu_1 - \mu_2 < -0.473) = 0.95$ (significance)

**Conclusion**
- The null hypothesis $H_0: \mu_1 = \mu_2$ is strongly rejected with $P(\mu_1 < \mu_2) = 0$, indicating a significant difference between $\mu_1$ and $\mu_2$.
$t(\mu_1 = 7.89, \sigma_1 = 0.2, \nu = 24.04)$

$P(\mu_1 > \mu_2) = 0.171$

$P(-0.342 < \mu_1 - \mu_2 < 0.126) = 0.95$
$t(\mu_1 = 8.02, \sigma_1 = 0.23, \nu = 24.31)$

$P(\mu_1 > \mu_2) = 0.565$

$P(-0.235 < \mu_1 - \mu_2 < 0.278) = 0.95$
\[ P(\mu_1 > \mu_2) = 0.05 \]

\[ P(-0.31 < \mu_1 - \mu_2 < 0.033) = 0.95 \]

\[ t(\mu_1 = 7.86, \sigma_1 = 0.1, \nu = 25.81) \]

\[ t(\mu_2 = 8, \sigma_2 = 0.15, \nu = 25.81) \]
$t( \mu_1 = 8.06, \sigma_1 = 0.2, \nu = 24.59 )$

$P( \mu_1 > \mu_2 ) = 0.694$

$P( -0.172 < \mu_1 - \mu_2 < 0.285 ) = 0.95$
\[ t(\mu_1 = 7.75, \sigma_1 = 0.14, \nu = 25.16) \]

\[ P(\mu_1 > \mu_2) = 0.006 \]

\[ P(-0.441 < \mu_1 - \mu_2 < -0.061) = 0.95 \text{ (sig)} \]
\( \mu_1 = 8.03, \sigma_1 = 0.18, \nu = 24.36 \)

\( P(\mu_1 > \mu_2) = 0.613 \)

\( t(\mu_2 = 8, \sigma_2 = 0.15, \nu = 24.36) \)

\( P(-0.188 < \mu_1 - \mu_2 < 0.239) = 0.95 \)
\[ t(\mu_1 = 7.64, \sigma_1 = 0.13, \nu = 23.82) \]

\[ P(\mu_1 > \mu_2) = 0.001 \]

\[ P(-0.546 < \mu_1 - \mu_2 < -0.17) = 0.95 \text{ (sig)} \]
$t(\mu_1 = 8.36, \sigma_1 = 0.15, \nu = 25.9)$

$P(\mu_1 > \mu_2) = 0.999$

$P(0.17 < \mu_1 - \mu_2 < 0.554) = 0.95$ (sig)

$AFUB_{024170}$ (I−17b)
t(\(\mu_1 = 7.97, \sigma_1 = 0.18, \nu = 24.77\))

\[ P(\mu_1 > \mu_2) = 0.396 \]

\[ P(-0.245 < \mu_1 - \mu_2 < 0.191) = 0.95 \]
$P(\mu_1 > \mu_2) = 0.999$

$t(\mu_1 = 8.41, \sigma_1 = 0.21, \nu = 25.18)$

$P(0.177 < \mu_1 - \mu_2 < 0.658) = 0.95$ (sig)
$t(\mu_1 = 8.48, \sigma_1 = 0.17, \nu = 24.62)$

$P(\mu_1 > \mu_2) = 1$

$P(0.269 < \mu_1 - \mu_2 < 0.688) = 0.95 \text{ (sig)}$
\( t(\mu_1 = 7.46, \sigma_1 = 0.02, \nu = 26.1) \)

\[ P(\mu_1 > \mu_2) = 0 \]

\[ P(\mu_1 - \mu_2 < -0.806 < \mu_1 - \mu_2 < -0.614) = 0.95 \text{ (sig)} \]
$t(\mu_1 = 8.33, \sigma_1 = 0.19, \nu = 23.52)$

$P(\mu_1 > \mu_2) = 0.942$

$P(-0.043 < \mu_1 - \mu_2 < 0.354) = 0.95$
$t(\mu_1 = 7.87, \sigma_1 = 0.16, \nu = 25.13)$

$P(\mu_1 > \mu_2) = 0.001$

$P(-0.47 < \mu_1 - \mu_2 < -0.124) = 0.95 \text{ (sig)}$
$t(\mu_1 = 7.67, \sigma_1 = 0.12, \nu = 26.1)$

$P(\mu_1 > \mu_2) = 0$

$P(-0.642 < \mu_1 - \mu_2 < -0.348) = 0.95$ (sig)
\[ t(\mu_1 = 7.86, \sigma_1 = 0.28, \nu = 21.41) \]

\[ P(\mu_1 > \mu_2) = 0.014 \]

\[ P(-0.589 < \mu_1 - \mu_2 < -0.033) = 0.95 \text{ (sig)} \]
\( t(\mu_1 = 8.08, \sigma_1 = 0.13, \nu = 24.3) \)

\[ P(\mu_1 > \mu_2) = 0.105 \]

\[ P(-0.24 < \mu_1 - \mu_2 < 0.06) = 0.95 \]
\( t(\mu_1 = 8.15, \sigma_1 = 0.19, \nu = 24.59) \)

\( P(\mu_1 > \mu_2) = 0.409 \)

\( P(-0.214 < \mu_1 - \mu_2 < 0.177) = 0.95 \)
$t(\mu_1 = 8.31, \sigma_1 = 0.25, \nu = 23.58)$

$P(\mu_1 > \mu_2) = 0.865$

$P(-0.111 < \mu_1 - \mu_2 < 0.392) = 0.95$
\( t(\mu_1 = 8.15, \sigma_1 = 0.1, \nu = 24.67) \)

\( P(\mu_1 > \mu_2) = 0.364 \)

\( t(\mu_2 = 8.17, \sigma_2 = 0.1, \nu = 24.67) \)

\( P(-0.148 < \mu_1 - \mu_2 < 0.11) = 0.95 \)
\( t(\mu_1 = 8.22, \sigma_1 = 0.29, \nu = 22.33) \)

\( P(\mu_1 > \mu_2) = 0.629 \)

\( t(\mu_2 = 8.17, \sigma_2 = 0.1, \nu = 22.33) \)

\( P( -0.24 < \mu_1 - \mu_2 < 0.324 ) = 0.95 \)
\[ t(\mu_1 = 8.13, \sigma_1 = 0.1, \nu = 25.88) \]

\[ P(\mu_1 > \mu_2) = 0.227 \]

\[ P(-0.179 < \mu_1 - \mu_2 < 0.089) = 0.95 \]
t(μ₁ = 7.66, σ₁ = 0.17, ν = 25.36)

P(μ₁ > μ₂) = 0

P(−0.694 < μ₁ − μ₂ < −0.333) = 0.95 (sig)

T(μ₂ = 8.17, σ₂ = 0.1, ν = 25.36)

AFUB_040580 (I−17c)

A1160p+ (I−17c)
\[ t(\mu_1 = 8.05, \sigma_1 = 0.18, \nu = 24.13) \]

\[ P(\mu_1 > \mu_2) = 0.003 \]

\[ P(-0.557 < \mu_1 - \mu_2 < -0.105) = 0.95 \text{ (sig)} \]
$t(\mu_1 = 8, \sigma_1 = 0.19, \nu = 20.74)$

$P(\mu_1 > \mu_2) = 0.001$

$P(-0.619 < \mu_1 - \mu_2 < -0.155) = 0.95$ (sig)
\( P(\mu_1 > \mu_2) = 0 \)

\[ t(\mu_1 = 7.67, \sigma_1 = 0.16, \nu = 20.23) \]

\[ P(-0.925 < \mu_1 - \mu_2 < -0.495) = 0.95 \text{(sig)} \]
\[ t(\mu_1 = 8.51, \sigma_1 = 0.22, \nu = 23.64) \]

\[ P(\mu_1 > \mu_2) = 0.858 \]

\[ P(-0.112 < \mu_1 - \mu_2 < 0.388) = 0.95 \]
$P(\mu_1 > \mu_2) = 0.683$

$t(\mu_1 = 8.45, \sigma_1 = 0.25, \nu = 22.81)$

$P(-0.214 < \mu_1 - \mu_2 < 0.344) = 0.95$
\( t(\mu_1 = 6.84, \sigma_1 = 0.1, \nu = 25.59) \)

\[ P(\mu_1 > \mu_2) = 0 \]

\[ P(-0.846 < \mu_1 - \mu_2 < -0.493) = 0.95 \, \text{(sig)} \]
\( t(\mu_1 = 7.52, \sigma_1 = 0.06, \nu = 25.01) \)

\[ P(\mu_1 > \mu_2) = 0.569 \]

\( P(\mu_2 \geq \mu_1 \geq \mu_2 + 0.176) = 0.95 \)
\[ t(\mu_1 = 6.73, \sigma_1 = 0.12, \nu = 24.94) \]

\[ P(\mu_1 > \mu_2) = 0 \]

\[ P(-0.957 < \mu_1 - \mu_2 < -0.587) = 0.95 \text{ (sig)} \]
\[ t(\mu_1 = 7.9, \sigma_1 = 0.07, \nu = 25.62) \]

\[ P(\mu_1 > \mu_2) = 1 \]

\[ P(0.225 < \mu_1 - \mu_2 < 0.553) = 0.95 \text{ (sig)} \]
\text{AFUB}_007280 \ (I^{-1b})

\text{P}(\mu_1 > \mu_2) = 0.999

\text{P}(0.165 < \mu_1 - \mu_2 < 0.527) = 0.95 \ (\text{sig})
\( t(\mu_1 = 7.89, \sigma_1 = 0.21, \nu = 24.32) \)

\[ P(\mu_1 > \mu_2) = 0.998 \]

\[ P(0.141 < \mu_1 - \mu_2 < 0.628) = 0.95 \text{ (sig)} \]
$t(\mu_1 = 7.47, \sigma_1 = 0.09, \nu = 26.34)$

$P(\mu_1 > \mu_2) = 0.326$

$P(-0.207 < \mu_1 - \mu_2 < 0.133) = 0.95$
\( t(\mu_1 = 7.59, \sigma_1 = 0.11, \nu = 24.49) \)

\[ P( \mu_1 > \mu_2 ) = 0.817 \]

\( P( -0.101 < \mu_1 - \mu_2 < 0.257 ) = 0.95 \)
$t(\mu_1 = 7.56, \sigma_1 = 0.17, \nu = 22.07)$

$P(\mu_1 > \mu_2) = 0.692$

$P(-0.161 < \mu_1 - \mu_2 < 0.27) = 0.95$
\[ t(\mu_1 = 7.58, \sigma_1 = 0.2, \nu = 23.49) \]

\[ P(\mu_1 > \mu_2) = 0.726 \]

\[ P(-0.172 < \mu_1 - \mu_2 < 0.305) = 0.95 \]
\( t(\mu_1 = 6.82, \sigma_1 = 0.17, v = 21.32) \)

\( P(\mu_1 > \mu_2) = 0 \)

\( P(-1.128 < \mu_1 - \mu_2 < -0.736) = 0.95 \) (sig)
\[ t(\mu_1 = 7.94, \sigma_1 = 0.22, \nu = 18.66) \]

\[ P(\mu_1 > \mu_2) = 0.947 \]

\[ P(-0.039 < \mu_1 - \mu_2 < 0.432) = 0.95 \]
\( t(\mu_1 = 7.77, \sigma_1 = 0.15, \nu = 24.16) \)

\( P(\mu_1 > \mu_2) = 0.575 \)

\( P(-0.166 < \mu_1 - \mu_2 < 0.195) = 0.95 \)
\[ t(\mu_1 = 7.93, \sigma_1 = 0.1, \nu = 25.53) \]

\[ P(\mu_1 > \mu_2) = 0.989 \]

\[ P(0.029 < \mu_1 - \mu_2 < 0.32) = 0.95 \text{ (sig)} \]
$t(\mu_1 = 7.69, \sigma_1 = 0.15, \nu = 24.6)$

$P(\mu_1 > \mu_2) = 0.235$

$P(-0.24 < \mu_1 - \mu_2 < 0.114) = 0.95$
\[ t(\mu_1 = 7.82, \sigma_1 = 0.14, \nu = 23.24) \]

\[ P(\mu_1 > \mu_2) = 0.78 \]

\[ P(-0.107 < \mu_1 - \mu_2 < 0.232) = 0.95 \]
\( t(\mu_1 = 7.64, \sigma_1 = 0.25, \nu = 14.99) \)

\( P(\mu_1 > \mu_2) = 0.2 \)

\( P(-0.377 < \mu_1 - \mu_2 < 0.154) = 0.95 \)
$t(\mu_1 = 7.4, \sigma_1 = 0.07, \nu = 24.94)$

$P(\mu_1 > \mu_2) = 0$

$P(-0.487 < \mu_1 - \mu_2 < -0.223) = 0.95$ (sig)

$A1160p+ (I-3a)$

$AFUB_012800 (I-3a)$
$t(\mu_1 = 7.61, \sigma_1 = 0.15, \nu = 23.54)$

$P(\mu_1 > \mu_2) = 0.05$

$P(-0.332 < \mu_1 - \mu_2 < 0.03) = 0.95$
\( t(\mu_1 = 7.3, \sigma_1 = 0.24, \nu = 22.46) \)

\( P(\mu_1 > \mu_2) = 0 \)

\( P( -0.711 < \mu_1 - \mu_2 < -0.211 ) = 0.95 \) (sig)
\[ P(\mu_1 > \mu_2) = 0 \]

\[ t(\mu_1 = 7.34, \sigma_1 = 0.05, \nu = 25.42) \]

\[ P(-0.534 < \mu_1 - \mu_2 < -0.291) = 0.95 \text{ (sig)} \]
\[
p(\mu_1 > \mu_2) = 0
\]

\[
P(-0.754 < \mu_1 - \mu_2 < -0.368) = 0.95 \text{ (sig)}
\]

\[
t(\mu_1 = 7.83, \sigma_1 = 0.09, \nu = 25.92)
\]

\[
t(\mu_2 = 7.59, \sigma_2 = 0.18, \nu = 25.92)
\]

Frequency

\[
\begin{array}{c|c|c|c}
6.5 & 7.0 & 7.5 & 8.0 \\
6.5 & 7.0 & 7.5 & 8.0 \\
\end{array}
\]
\[ t(\mu_1 = 7.51, \sigma_1 = 0.16, \nu = 25.18) \]

\[ P(\mu_1 > \mu_2) = 0.247 \]

\[ P(-0.302 < \mu_1 - \mu_2 < 0.148) = 0.95 \]
t(\mu_1 = 7.59, \sigma_1 = 0.21, \nu = 17.25)

P(\mu_1 > \mu_2) = 0.516

\mu_{diff} = \frac{\mu_1 - \mu_2}{\sigma_1 \sqrt{\frac{\nu}{\nu + 1}}} = 0.008

AFUB_014400 (I−3b)

P(-0.248 < \mu_1 - \mu_2 < 0.278) = 0.95
\[ t(\mu_1 = 7.23, \sigma_1 = 0.11, \nu = 25.8) \]

\[ P(\mu_1 > \mu_2) = 0.001 \]

\[ P(-0.557 < \mu_1 - \mu_2 < -0.157) = 0.95 \text{ (sig)} \]
\( t(\mu_1 = 7.35, \sigma_1 = 0.14, \nu = 26.3) \)

\[ P(\mu_1 > \mu_2) = 0.016 \]

\[ P(-0.447 < \mu_1 - \mu_2 < -0.023) = 0.95 \text{ (sig)} \]
\( t(\mu_1 = 7.28, \sigma_1 = 0.18, \nu = 24.45) \)

\[ P(\mu_1 > \mu_2) = 0.008 \]

\[ P(-0.544 < \mu_1 - \mu_2 < -0.067) = 0.95 \text{ (sig)} \]
$t(\mu_1 = 7.2, \sigma_1 = 0.28, \nu = 21.51)$

$P(\mu_1 > \mu_2) = 0.008$

$P(-0.704 < \mu_1 - \mu_2 < -0.072) = 0.95$ (sig)
\[ t(\mu_1 = 7.44, \sigma_1 = 0.23, \nu = 18.79) \]

\[ P(\mu_1 > \mu_2) = 0.139 \]

\[ P(-0.427 < \mu_1 - \mu_2 < 0.132) = 0.95 \]
$t(\mu_1 = 7.35, \sigma_1 = 0.19, \nu = 24.79)$

$P(\mu_1 > \mu_2) = 0.031$

$P(-0.484 < \mu_1 - \mu_2 < 0.015) = 0.95$
\( t(\mu_1 = 7.91, \sigma_1 = 0.25, \nu = 14.69) \)

\( P(\mu_1 > \mu_2) = 0.099 \)

\( P(-0.614 < \mu_1 - \mu_2 < 0.14) = 0.95 \)
\[ t(\mu_1 = 7.79, \sigma_1 = 0.09, \nu = 20.41) \]

\[ P(\mu_1 > \mu_2) = 0.008 \]

\[ P(-0.666 < \mu_1 - \mu_2 < -0.071) = 0.95 \text{ (sig)} \]
\[ t(\mu_1 = 8.16, \sigma_1 = 0.27, \nu = 14.98) \]

\[ P(\mu_1 > \mu_2) = 0.52 \]

\[ P(-0.391 < \mu_1 - \mu_2 < 0.42) = 0.95 \]
\( t(\mu_1 = 8.31, \sigma_1 = 0.14, \nu = 19.06) \)

\[ P(\mu_1 > \mu_2) = 0.843 \]

\[ P(-0.168 < \mu_1 - \mu_2 < 0.474) = 0.95 \]
$$t(\mu_1 = 8.01, \sigma_1 = 0.16, \nu = 20.91)$$

$$P(\mu_1 > \mu_2) = 0.174$$

$$P(-0.473 < \mu_1 - \mu_2 < 0.169) = 0.95$$
\[
\begin{align*}
\text{Pdf}(\mu_1 > \mu_2) &= 0.098 \\
\text{P}( -0.485 < \mu_1 - \mu_2 < 0.102 ) &= 0.95
\end{align*}
\]
\[ t(\mu_1 = 8.29, \sigma_1 = 0.22, \nu = 18.03) \]

\[ P(\mu_1 > \mu_2) = 0.788 \]

\[ P(-0.221 < \mu_1 - \mu_2 < 0.505) = 0.95 \]
\[ t(\mu_1 = 7.94, \sigma_1 = 0.2, \nu = 17.44) \]

\[ P(\mu_1 > \mu_2) = 0.124 \]

\[ P( -0.573 < \mu_1 - \mu_2 < 0.146 ) = 0.95 \]
\( t(\mu_1 = 7.95, \sigma_1 = 0.17, \nu = 0.9) \)

\[ P(\mu_1 > \mu_2) = 0.275 \]

\[ P(-0.575 < \mu_1 - \mu_2 < 0.269) = 0.95 \]
\( t(\mu_1 = 7.81, \sigma_1 = 0.18, \nu = 19.71) \)

\[ P(\mu_1 > \mu_2) = 0.021 \]

\[ P(-0.668 < \mu_1 - \mu_2 < 0.001) = 0.95 \]
\( t(\mu_1 = 8.04, \sigma_1 = 0.15, \nu = 22.02) \)

\[ P(\mu_1 > \mu_2) = 0.002 \]

\[ P(-0.705 < \mu_1 - \mu_2 < -0.156) = 0.95 \text{ (sig)} \]
$t(\mu_1 = 8.52, \sigma_1 = 0.24, \nu = 19.66)$

$P(\mu_1 > \mu_2) = 0.617$

$P(-0.269 < \mu_1 - \mu_2 < 0.383) = 0.95$
\[
\begin{align*}
&\text{t}(\mu_1 = 8.14, \sigma_1 = 0.1, \nu = 23.36) \\
&P(\mu_1 > \mu_2) = 0.007 \\
&P(-0.583 < \mu_1 - \mu_2 < -0.075) = 0.95 \text{ (sig)}
\end{align*}
\]
$t(\mu_1 = 7.94, \sigma_1 = 0.3, \nu = 17.03)$

$P(\mu_1 > \mu_2) = 0.005$

$P(-0.939 < \mu_1 - \mu_2 < -0.153) = 0.95$ (sig)
\[ t(\mu_1 = 8.25, \sigma_1 = 0.06, \nu = 24.4) \]

\[ P(\mu_1 > \mu_2) = 0.036 \]

\[ P(-0.459 < \mu_1 - \mu_2 < 0.024) = 0.95 \]
**Summary:**
- \( t(\mu_1 = 8.05, \sigma_1 = 0.08, \nu = 24.31) \)
- \( P(\mu_1 > \mu_2) = 0.001 \)
- \( P(-0.666 < \mu_1 - \mu_2 < -0.172) = 0.95 \) (sig)

**Details:**
- The graph shows a t-distribution with parameters: \( \mu_1 = 8.05, \sigma_1 = 0.08, \nu = 24.31 \)
- The probability \( P(\mu_1 > \mu_2) = 0.001 \) indicates a significant difference between the means.
- The probability \( P(-0.666 < \mu_1 - \mu_2 < -0.172) = 0.95 \) suggests that the difference is not significant in the direction of \( \mu_1 - \mu_2 \).
\[ t(\mu_1 = 8.23, \sigma_1 = 0.23, \nu = 19.94) \]

\[ P(\mu_1 > \mu_2) = 0.062 \]

\[ t(\mu_2 = 8.47, \sigma_2 = 0.25, \nu = 19.94) \]

\[ P(-0.559 < \mu_1 - \mu_2 < 0.07) = 0.95 \]
\[ t(\mu_1 = 7.88, \sigma_1 = 0.22, \nu = 21) \]

\[ \Pr(\mu_1 > \mu_2) = 0 \]

\[ P(-0.91 < \mu_1 - \mu_2 < -0.28) = 0.95 \text{ (sig)} \]
\[ t(\mu_1 = 8.12, \sigma_1 = 0.16, \nu = 18.61) \]

\[ P(\mu_1 > \mu_2) = 0.009 \]

\[ P(-0.631 < \mu_1 - \mu_2 < -0.064) = 0.95 \text{ (sig)} \]
\( t(\mu_1 = 7.86, \sigma_1 = 0.27, \nu = 21.01) \)

\( P(\mu_1 > \mu_2) = 0.001 \)

\( t(\mu_2 = 8.47, \sigma_2 = 0.25, \nu = 21.01) \)

\( P( -0.962 < \mu_1 - \mu_2 < -0.268 ) = 0.95 \) (sig)
\[ t(\mu_1 = 7.95, \sigma_1 = 0.13, \nu = 22.92) \]

\[ P(\mu_1 > \mu_2) = 0 \]

\[ P(0.79 < \mu_1 - \mu_2 < 0.258) = 0.95 \text{ (sig)} \]
\[ P(\mu_1 > \mu_2) = 0.03 \]

\[ P(-0.397 < \mu_1 - \mu_2 < 0.007) = 0.95 \]
\( t(\mu_1 = 7.43, \sigma_1 = 0.16, \nu = 19.39) \)

\[ P(\mu_1 > \mu_2) = 0.915 \]

\[ P(-0.073 < \mu_1 - \mu_2 < 0.353) = 0.95 \]
\[ t(\mu_1 = 7.52, \sigma_1 = 0.14, \nu = 22.55) \]

\[ P(\mu_1 > \mu_2) = 0.985 \]

\[ P(0.027 < \mu_1 - \mu_2 < 0.431) = 0.95 \text{ (sig)} \]
\[ t(\mu_1 = 7.4, \sigma_1 = 0.19, \nu = 19.38) \]

\[ P(\mu_1 > \mu_2) = 0.831 \]

\[ t(\mu_2 = 7.29, \sigma_2 = 0.16, \nu = 19.38) \]

\[ P(-0.12 < \mu_1 - \mu_2 < 0.341) = 0.95 \]
\[ t(\mu_1 = 7.22, \sigma_1 = 0.07, \nu = 25.36) \]

\[ P(\mu_1 > \mu_2) = 0.187 \]

\[ t(\mu_2 = 7.29, \sigma_2 = 0.17, \nu = 25.36) \]

\[ P(-0.248 < \mu_1 - \mu_2 < 0.09) = 0.95 \]
\[ t(\mu_1 = 7.28, \sigma_1 = 0.12, \nu = 25.34) \]

\[ P(\mu_1 > \mu_2) = 0.442 \]

\[ P(-0.207 < \mu_1 - \mu_2 < 0.171) = 0.95 \]
\begin{align*}
\text{P}(\mu_1 > \mu_2) &= 0.92 \\
\text{P}(-0.075 < \mu_1 - \mu_2 < 0.393) &= 0.95
\end{align*}
\( t(\mu_1 = 7.38, \sigma_1 = 0.18, \nu = 23.89) \)

\[ P(\mu_1 > \mu_2) = 0.797 \]

\[ P(-0.142 < \mu_1 - \mu_2 < 0.316) = 0.95 \]
\( t(\mu_1 = 7.31, \sigma_1 = 0.22, \nu = 23.75) \)

\[ P(\mu_1 > \mu_2) = 0.547 \]

\[ P(-0.238 < \mu_1 - \mu_2 < 0.275) = 0.95 \]
\[ \mu_1 = 7.45, \sigma_1 = 0.22, \nu = 24.05 \]

\[ P(\mu_1 > \mu_2) = 0.899 \]

\[ \text{AFUB}_037850 \text{ (I-7a)} \]

\[ \text{AFUB}_037850 \text{ (I-7a)} \]

\[ \mu_2 = 7.29, \sigma_2 = 0.16, \nu = 24.05 \]

\[ P(-0.102 < \mu_1 - \mu_2 < 0.417) = 0.95 \]
t(\(\mu_1 = 7.54, \sigma_1 = 0.11, \nu = 25.14\))

\[ P(\mu_1 > \mu_2) = 0.994 \]

\[ P(0.06 < \mu_1 - \mu_2 < 0.426) = 0.95 \text{ (sig)} \]
\( t(\mu_1 = 7.13, \sigma_1 = 0.15, \nu = 24.6) \)

\[ P(\mu_1 > \mu_2) = 0.062 \]

\[ P(-0.362 < \mu_1 - \mu_2 < 0.051) = 0.95 \]

\( t(\mu_2 = 7.29, \sigma_2 = 0.17, \nu = 24.6) \)
\[ t(\mu_1 = 7.37, \sigma_1 = 0.31, \nu = 20.86) \]

\[ P(\mu_1 > \mu_2) = 0.001 \]

\[ P(-0.927 < \mu_1 - \mu_2 < -0.247) = 0.95 \text{ (sig)} \]
$P(\mu_1 > \mu_2) = 0.613$

$P(-0.246 < \mu_1 - \mu_2 < 0.326) = 0.95$
\[ P(\mu_1 > \mu_2) = 0 \]

\[ P(-0.873 < \mu_1 - \mu_2 < -0.358) = 0.95 \text{ (sig)} \]

\[ t(\mu_1 = 7.35, \sigma_1 = 0.19, \nu = 18.13) \]

\[ t(\mu_2 = 7.96, \sigma_2 = 0.19, \nu = 18.13) \]

\[ P(\text{AFUB}_043270 \text{ (I-8a)}) \]

\[ -1.0 -0.5 0.0 \]

\[ -1.0 -0.5 0.0 \]

\[ -1.0 -0.5 0.0 \]

\[ -1.0 -0.5 0.0 \]
\[ t(\mu_1 = 7.56, \sigma_1 = 0.13, \nu = 24.34) \]

\[ P(\mu_1 > \mu_2) = 0.001 \]

\[ P(-0.624 < \mu_1 - \mu_2 < -0.194) = 0.95 (\text{sig}) \]
\[ t(\mu_1 = 7.56, \sigma_1 = 0.22, \nu = 22.74) \]

\[ P(\mu_1 > \mu_2) = 0.003 \]

\[ P(−0.673 < \mu_1 − \mu_2 < −0.129) = 0.95 \text{ (sig)} \]

AFUB_044060 (I−8a)

A160p+ (I−8a)
\[ t(\mu_1 = 7.91, \sigma_1 = 0.11, \nu = 25.18) \]

\[ P(\mu_1 > \mu_2) = 0.3 \]

\[ P(-0.261 < \mu_1 - \mu_2 < 0.154) = 0.95 \]

(\text{AFUB_044290 (I-8a)})
$t(\mu_1 = 7.91, \sigma_1 = 0.05, v = 25.38)$

$P(\mu_1 > \mu_2) = 0.282$

$P(-0.238 < \mu_1 - \mu_2 < 0.138) = 0.95$
\[ t(\mu_1 = 7.66, \sigma_1 = 0.1, \nu = 25.34) \]

\[ P(\mu_1 > \mu_2) = 0.003 \]

\[ P(-0.498 < \mu_1 - \mu_2 < -0.095) = 0.95 \text{ (sig)} \]

\[ \mu_2 = 7.96, \sigma_2 = 0.2, \nu = 25.34 \]
\( t(\mu_1 = 7.55, \sigma_1 = 0.16, \nu = 24.12) \)

\[ P(\mu_1 > \mu_2) = 0.001 \]

\[ P( \mu_1 > \mu_2 ) = 0.001 \]

\[ P( -0.646 < \mu_1 - \mu_2 < -0.179 ) = 0.95 \text{ (sig)} \]
\[ t(\mu_1 = 7.53, \sigma_1 = 0.13, \nu = 24.2) \]

\[ P(\mu_1 > \mu_2) = 0 \]

\[ P(-0.645 < \mu_1 - \mu_2 < -0.207) = 0.95 \text{ (sig)} \]
$t(\mu_1 = 7.75, \sigma_1 = 0.11, \nu = 24.5)$

$P(\mu_1 > \mu_2) = 0.024$

$P(-0.422 < \mu_1 - \mu_2 < -0.001) = 0.95$ (sig)
$t(\mu_1 = 7.55, \sigma_1 = 0.06, \nu = 25.06)$

$P(\mu_1 > \mu_2) = 0$

$P(-0.602 < \mu_1 - \mu_2 < -0.219) = 0.95$ (sig)
\( t(\mu_1 = 7.55, \sigma_1 = 0.08, \nu = 26) \)

\[ P(\mu_1 > \mu_2) = 0 \]

\[ P(-0.566 < \mu_1 - \mu_2 < -0.281) = 0.95 \] (sig)
$t(\mu_1 = 7.69, \sigma_1 = 0.21, \nu = 0.96)$

$P(\mu_1 > \mu_2) = 0.043$

$P(-0.673 < \mu_1 - \mu_2 < 0.073) = 0.95$
\[ t(\mu_1 = 7.74, \sigma_1 = 0.07, \nu = 25.7) \]

\[ P(\mu_1 > \mu_2) = 0.002 \]

\[ P(-0.372 < \mu_1 - \mu_2 < -0.092) = 0.95 \text{ (sig)} \]
\[ t(\mu_1 = 7.69, \sigma_1 = 0.16, \nu = 24.92) \]

\[ P(\mu_1 > \mu_2) = 0.003 \]

\[ P(-0.48 < \mu_1 - \mu_2 < -0.1) = 0.95 \text{ (sig)} \]

\[ t(\mu_2 = 7.97, \sigma_2 = 0.18, \nu = 24.92) \]

**AFUB_045820 (I−8b)**

**A1160p+ (I−8b)**
\( P(\mu_1 > \mu_2) = 0.006 \)

\( t(\mu_1 = 7.7, \sigma_1 = 0.18, \nu = 15.23) \)

\( P(-0.487 < \mu_1 - \mu_2 < -0.069) = 0.95 \) (sig)
\( t(\mu_1 = 7.65, \sigma_1 = 0.13, \nu = 23.22) \)

\[ P(\mu_1 > \mu_2) = 0.001 \]

\[ P(-0.497 < \mu_1 - \mu_2 < -0.15) = 0.95 \] (sig)
$P(\mu_1 > \mu_2) = 0$

$t(\mu_1 = 7.53, \sigma_1 = 0.16, \nu = 25.13)$

$P(-0.635 < \mu_1 - \mu_2 < -0.254) = 0.95$ (sig)
\[ t(\mu_1 = 7.57, \sigma_1 = 0.05, \nu = 26.44) \]

\[ P(\mu_1 > \mu_2) = 0 \]

\[ P(\mu_1 \geq \mu_2) = 0.95 \text{ (sig)} \]

\[ P(-0.526 < \mu_1 - \mu_2 < -0.27) = 0.95 \text{ (sig)} \]
\( t(\mu_1 = 7.59, \sigma_1 = 0.12, \nu = 25.62) \)

\( P(\mu_1 > \mu_2) = 0 \)

\( P(-0.548 < \mu_1 - \mu_2 < -0.222) = 0.95 \) (sig)
$t(\mu_1 = 7.48, \sigma_1 = 0.13, \nu = 25.46)$

$P(\mu_1 > \mu_2) = 0$

$P\left(-0.663 < \mu_1 - \mu_2 < -0.325\right) = 0.95$ (sig)
\[ t(\mu_1 = 7.75, \sigma_1 = 0.09, \nu = 26.02) \]

\[ P(\mu_1 > \mu_2) = 0.004 \]

\[ P(\mu_1 > \mu_2) = 0.004 \]

\[ \mu_{diff} \]

\[ P(-0.369 < \mu_1 - \mu_2 < -0.071) = 0.95 \text{ (sig)} \]
\[ t(\mu_1 = 7.75, \sigma_1 = 0.19, \nu = 24.48) \]

\[ P(\mu_1 > \mu_2) = 0.022 \]

\[ P(-0.439 < \mu_1 - \mu_2 < -0.008) = 0.95 \text{ (sig)} \]

AFUB_047470 (I−8b)

A1160p+ (I−8b)
\( t(\mu_1 = 7.78, \sigma_1 = 0.07, \nu = 19.86) \)

\[ P(\mu_1 > \mu_2) = 0.091 \]

\[ P(\mu_1 - \mu_2 > 0.094) = 0.95 \]

\[ \mu \text{diff} \]

\[ \text{Frequency} \]

\[ -0.5 \quad 0.0 \quad 0.5 \]

\[ 7.0 \quad 7.5 \quad 8.0 \quad 8.5 \]

\[ 7.0 \quad 7.5 \quad 8.0 \quad 8.5 \]

\[ A_{1160p+} (1-8c) \]

\[ A_{1160p+} (1-8c) \]

\[ \mu_2 = 7.96, \sigma_2 = 0.27, \nu = 19.86 \]
\[ t(\mu_1 = 7.77, \sigma_1 = 0.09, \nu = 20.68) \]

\[ P(\mu_1 > \mu_2) = 0.076 \]

\[ P(-0.467 < \mu_1 - \mu_2 < 0.071) = 0.95 \]
\[ t(\mu_1 = 7.68, \sigma_1 = 0.05, \nu = 20.64) \]

\[ P(\mu_1 > \mu_2) = 0.021 \]

\[ P(-0.547 < \mu_1 - \mu_2 < -0.024) = 0.95 \text{ (sig)} \]
\( t(\mu_1 = 7.72, \sigma_1 = 0.07, \nu = 19.25) \)

\( P(\mu_1 > \mu_2) = 0.038 \)

\( P(-0.506 < \mu_1 - \mu_2 < 0.025) = 0.95 \)
\[ t(\mu_1 = 7.72, \sigma_1 = 0.03, \nu = 21.44) \]

\[ P(\mu_1 > \mu_2) = 0.036 \]

\[ P(-0.502 < \mu_1 - \mu_2 < 0.015) = 0.95 \]

\[ AFUB_048990 \]
\( t(\mu_1 = 7.83, \sigma_1 = 0.15, \nu = 19.87) \)

\[
P(\mu_1 > \mu_2) = 0.179
\]

\[
P(-0.425 < \mu_1 - \mu_2 < 0.155) = 0.95
\]
$t(\mu_1 = 7.68, \sigma_1 = 0.07, \nu = 21.05)$

$P(\mu_1 > \mu_2) = 0.023$

$P(-0.539 < \mu_1 - \mu_2 < -0.009) = 0.95$ (sig)

AFUB_049550 (I−8c)

A1160p+ (I−8c)
\[ t(\mu_1 = 7.73, \, \sigma_1 = 0.03, \, \nu = 21.67) \]

\[ P(\mu_1 > \mu_2) = 0.041 \]

\[ P(-0.492 < \mu_1 - \mu_2 < 0.029) = 0.95 \]
$P(\mu_1 > \mu_2) = 0$

$t(\mu_1 = 7.91, \sigma_1 = 0.14, \nu = 24.46)\]

$P(-0.787 < \mu_1 - \mu_2 < -0.477) = 0.95$ (sig)
\[
t(\mu_1 = 8.41, \sigma_1 = 0.05, \nu = 26.9)
\]

\[
P(\mu_1 > \mu_2) = 0.005
\]

\[
P(-0.228 < \mu_1 - \mu_2 < -0.042) = 0.95 \text{ (sig)}
\]
\[ t(\mu_1 = 8.34, \sigma_1 = 0.09, \nu = 25.06) \]

\[ \text{P}(\mu_1 > \mu_2) = 0.001 \]

\[ \text{P}( -0.321 < \mu_1 - \mu_2 < -0.082 ) = 0.95 \text{ (sig)} \]
\( t(\mu_1 = 8.54, \sigma_1 = 0.14, \nu = 25.84) \)

\[ P(\mu_1 > \mu_2) = 0.483 \]

\[ P(-0.153 < \mu_1 - \mu_2 < 0.152) = 0.95 \]
\( t(\mu_1 = 8.54, \sigma_1 = 0.09, \nu = 26.33) \)

\[
P(\mu_1 > \mu_2) = 0.448
\]

\[
P(-0.119 < \mu_1 - \mu_2 < 0.108) = 0.95
\]
t(μ₁ = 8.46, σ₁ = 0.15, ν = 25.74)

P(μ₁ > μ₂) = 0.141

AFUB_051540 (I−9a)

A1160p+ (I−9a)

P(−0.243 < μ₁ − μ₂ < 0.08) = 0.95
$P(\mu_1 > \mu_2) = 0$

$t(\mu_1 = 8.03, \sigma_1 = 0.18, \nu = 23.07)$

$P(-0.698 < \mu_1 - \mu_2 < -0.327) = 0.95$ (sig)

$P(\mu_1 = 8.54, \sigma_2 = 0.08, \nu = 23.07)$
\( t(\mu_1 = 7.78, \sigma_1 = 0.14, \nu = 25.76) \)

\[ P(\mu_1 > \mu_2) = 0 \]

\[ P(-0.907 < \mu_1 - \mu_2 < -0.607) = 0.95 \text{ (sig)} \]
\[ t(\mu_1 = 8.38, \sigma_1 = 0.12, \nu = 24.32) \]

\[ P(\mu_1 > \mu_2) = 0.013 \]

\[ P(-0.3 < \mu_1 - \mu_2 < -0.026) = 0.95 \text{ (sig)} \]
\begin{align*}
\text{t}(\mu_1 = 8.35, \sigma_1 = 0.09, \nu = 25.74) & \\
\text{P}(\mu_1 > \mu_2) &= 0.003 \\
\text{P}(\mu_1 - \mu_2 \leq -0.314) &< 0.05 \\
\text{P}(\mu_1 - \mu_2 \leq -0.074) &< 0.005
\end{align*}
\( t(\mu_1 = 8.44, \sigma_1 = 0.11, \nu = 25.29) \)

\[ P(\mu_1 > \mu_2) = 0.054 \]

\[ P(-0.227 < \mu_1 - \mu_2 < 0.03) = 0.95 \]

\[ t(\mu_2 = 8.54, \sigma_2 = 0.08, \nu = 25.29) \]