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| --- | --- | --- | --- |
| R output | Regression line formula | Significance | Model evaluation criteria |
|  | **Find the employment level for a male with the inflation level**  **2.273.**  **Find the employment level for a female with the inflation level**  **10.867.** | **β1-coefficient**  **p-value=**  **β2-coefficient**  **p-value=**  **the model**  **p-value=** | **R2adjusted=**  **RSE=**  **95% CI=**  **AIC=** |
|  | **Find the BPA level for a 50 y.o. female.**  **Find the BPA level for a 10 y.o. boy.** | **β1-coefficient**  **p-value=**  **β2-coefficient**  **p-value=**  **the model**  **p-value=** | **R2adjusted=**  **RSE=**  **95% CI=**  **AIC=** |

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| R output | Regression line formula | Significance | Model evaluation criteria |
| A screenshot of a computer  Description automatically generated | **Find the employment level for a male with the inflation level**  **2.273.**  45.431  **Find the employment level for a female with the inflation level**  **10.867.**  38.702 | **β1-coefficient**  **p-value=**  <0.001  **β2-coefficient**  **p-value=**  <0.001  **the model**  **p-value=**  <0.001 | **R2adjusted=**0.62  **RSE=4.68**  **95% CI=**  β1[-2.28;-1.38]  β2[-10.91;-7.18]  **AIC=**597.2 |
| A screenshot of a computer  Description automatically generated | **Find the BPA level for a 50 y.o. female.**  11.893  **Find the BPA level for a 10 y.o. boy.**  6.044 | **β1-coefficient**  **p-value=**  <0.001  **β2-coefficient**  **p-value=**  <0.001  **the model**  **p-value=**  <0.001 | **R2adjusted=**0.50  **RSE=**1.83  **95% CI=**  β1[0.07;0.12]  β2[-2.58;-1.12]  **AIC=**409 |

1 Y(employment)= α + β1\*X1(inflation) + β2\*X2(gender)= 58.58-1.83\*X1(inflation)-9.05\*X2(gender)

Y(employment)=58.58-1.83\*(2.273)-9.05\*1=58.58-4.103-9.05=45.427

2 Y(employment)= α + β1\*X1(inflation) + β2\*X2(gender)= 58.58-1.83\*X1(inflation)-9.05\*X2(gender)

Y(employment)=58.58-1.83\*(10.863)-9.05\*0=58.58-19.88=38.70

3 Y(bpa)= α + β1\*X1(age) + β2\*X2(gender)= 6.89+0.10\*X1(age)-1.85\*X2(gender)

Y(bpa)= 6.89+0.10\*50-1.85\*0=6.89+5=11.89

4 Y(bpa)= α + β1\*X1(age) + β2\*X2(gender)= 6.89+0.10\*X1(age)-1.85\*X2(gender)

Y(bpa)= 6.89+0.10\*10-1.85\*1=6.89+1-1.85=6.04