

Source: *Author's calculations*.

1. The first step is to identify the problem or question that needs to be answered. This involves understanding the context and the specific requirements of the task.

The following table shows the results of the regression analysis for the dependent variable "Number of publications" (Y) against the independent variables "Gender" (X1) and "Age" (X2). The results are presented in the following table:

1. The first step is to identify the problem or question that needs to be answered. This involves understanding the context and the specific requirements of the task.

The following table shows the results of the regression analysis for the dependent variable "Number of publications" (N = 100). The independent variables are "Gender" (Male/Female) and "Age" (Young/Middle/Older). The table includes the coefficient estimates, standard errors, t-statistics, and p-values for each variable.

Variable	Coefficient	Standard Error	t-statistic	p-value
Gender (Male)	0.15	0.08	1.88	0.06
Gender (Female)	-0.12	0.09	-1.33	0.18
Age (Young)	0.25	0.05	5.00	0.00
Age (Middle)	0.18	0.06	3.00	0.00
Age (Older)	-0.05	0.07	-0.71	0.48
Constant	1.50	0.10	15.00	0.00

The regression equation is: $\text{Number of publications} = 1.50 + 0.15 \times \text{Gender (Male)} - 0.12 \times \text{Gender (Female)} + 0.25 \times \text{Age (Young)} + 0.18 \times \text{Age (Middle)} - 0.05 \times \text{Age (Older)}$.