

$$y = b_0 + b_1 X_1 + b_2 X_2 + b_3 X_1 X_2$$

where $b_0 = \text{intercept} = 35.17$

$$b_1 = 1,935$$

$X_1 = \text{gender}$ male = 1 Female = 0

$$b_2 = 1,235$$

$X_2 = \text{years}$

$$b_3 = 0,258$$

$X_1 X_2 = \text{gen years}$

Male: $X_1 = 1$

$$y = 35.17 + (1,935)(1) + (1,235)(\text{years}) + 0,258(\text{gen years})$$

Female: $X_1 = 0$

$$y = 35.17 + (0) + (1,235)(\text{years}) + 0,258(\text{gen years})$$

$$y = 35.17 + (1,235)(\text{years}) + 0,258(\text{gen years})$$

- males start at a salary that \$1,935 higher than females
- Salaries increase at the same rate. That is similar merit raises each year. Slope b_2 is same for both

