$A-R^2$

$$A\text{-}R^2 = 1 - \frac{(1-R^2)(n-1)}{(n-k-1)}$$

n = sample size

k = # indvar

$$= 1 - \frac{(1-0.8)(1000-1)}{(1000-12-1)}$$

or: $R^2 = 0.8$

$$= 1 - \frac{(0.2)(999)}{987}$$

$$= \underline{0.77}$$

$$A\text{-}R^2 = 1 - \frac{(1-0.8)(100-1)}{(100-10-1)}$$

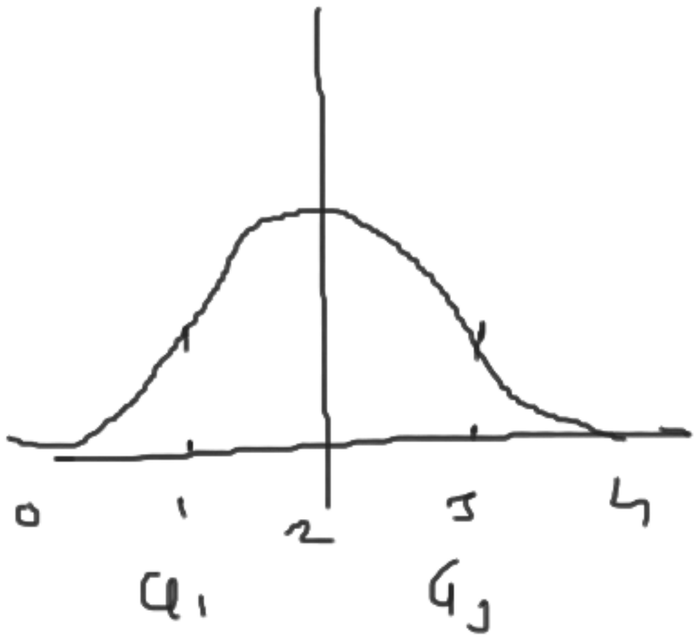
$$= 1 - \frac{(0.2)(99)}{89}$$

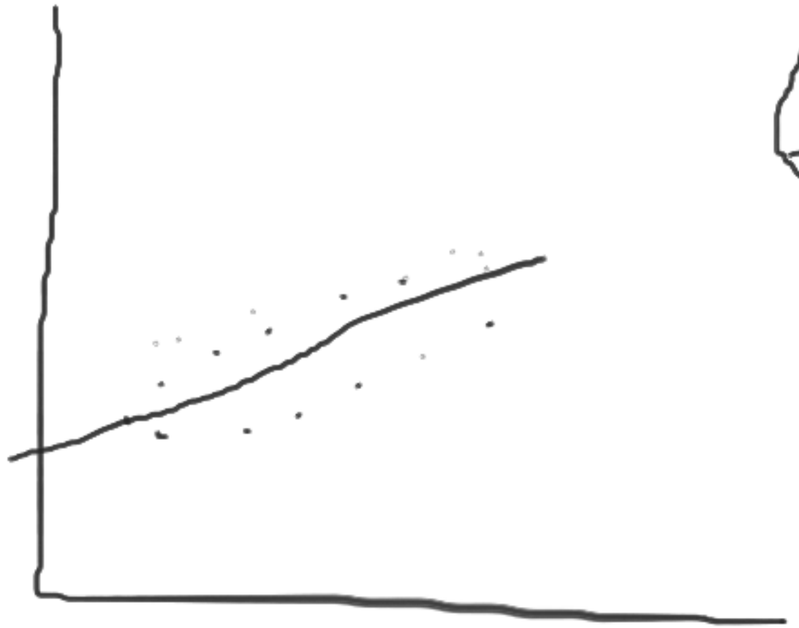
$$= 0.777$$

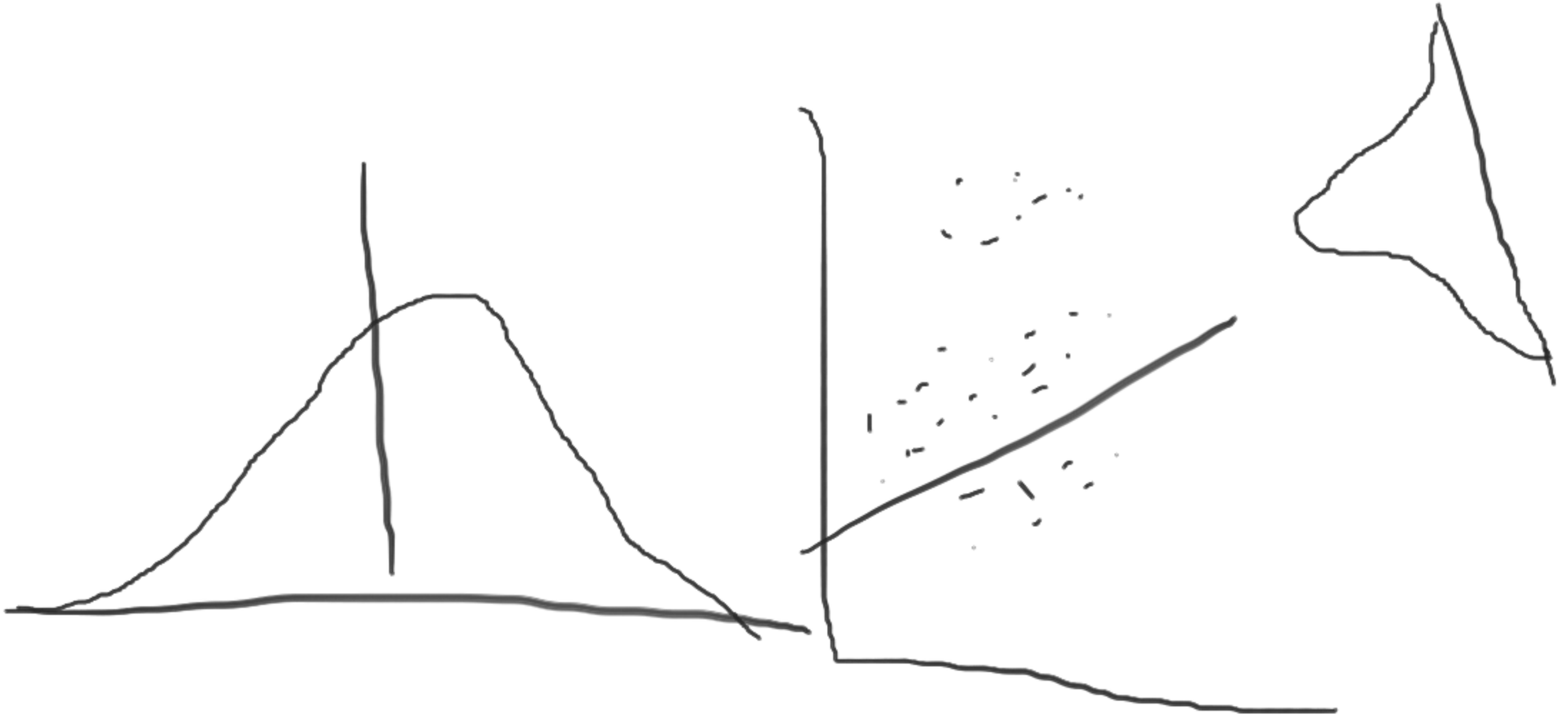
$A\text{-}R^2 < R^2$

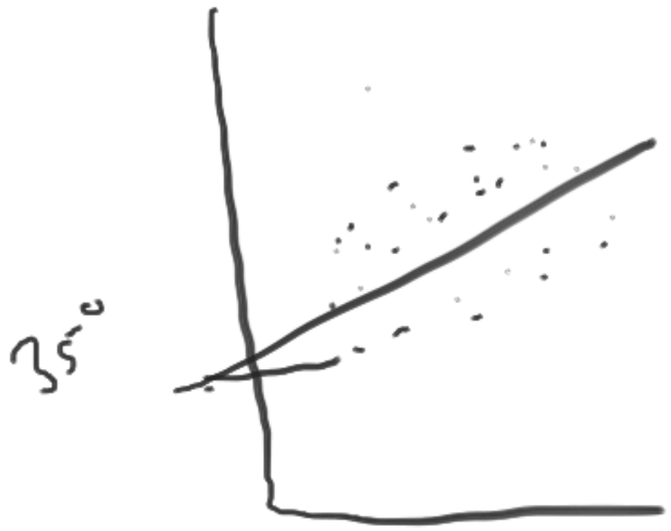
	R^2	$A\text{-}R^2$
	0.85	0.82
Good pred	0.875	0.845
Bad pred	0.88	0.84 | 0.835

Normality







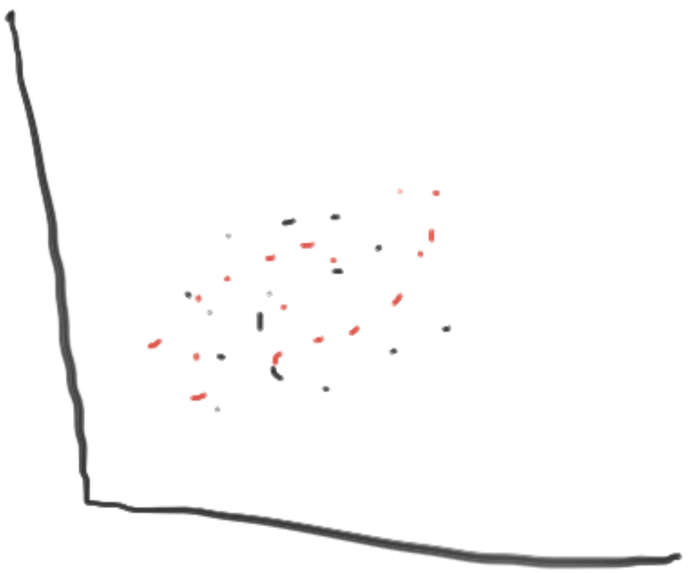


O

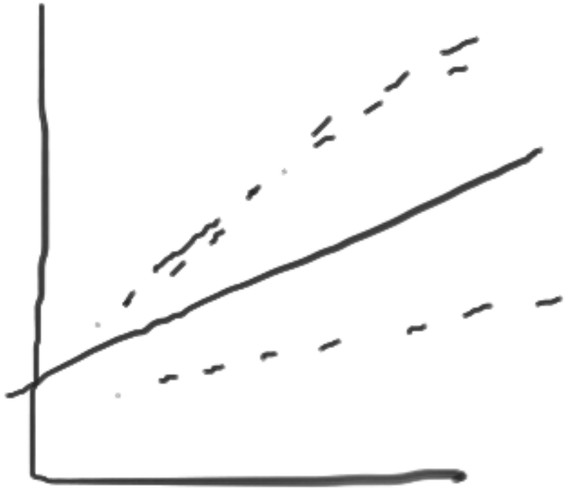
100 = 80

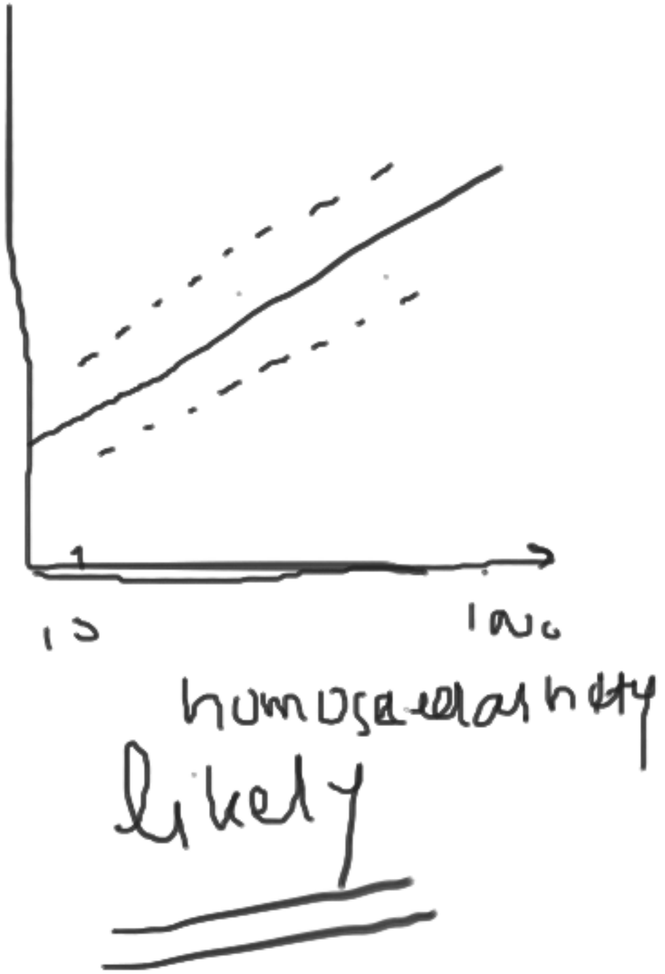
Age

20
46
35
81
200

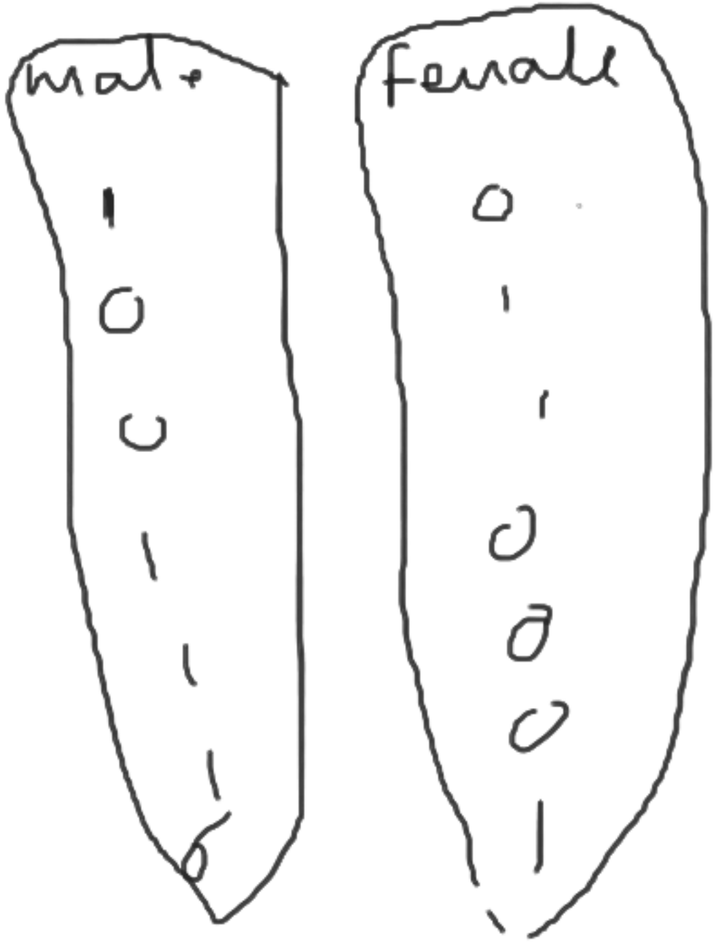


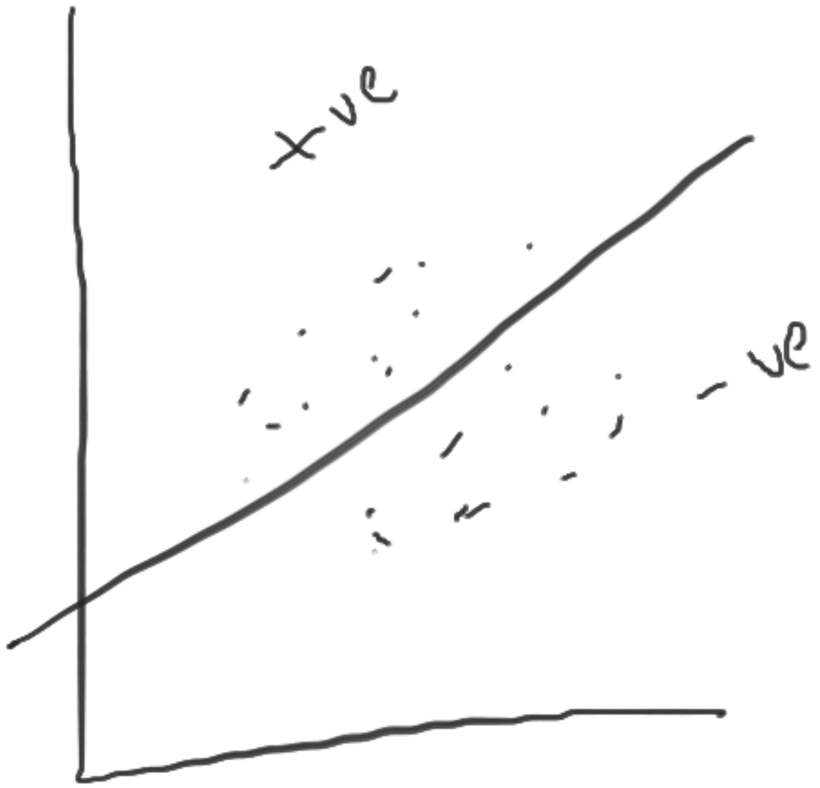
Homoscedasticity





	Gender	
1	m	0
2	f	1
3	f	1
4	m	0
5	m	0
6	m	0
7	f	1




+ve
- ve

VIF = range From 1 upward

$$= \frac{1}{1 - R^2}$$

$$= \frac{1}{1 - 0.76}$$

$$= 4.1$$

$\frac{1}{1} = 1$

$\frac{1}{1 - 0}$

VIF = 1

1-5 = moderate corr.

75 = highly correlated

$$\frac{1}{1-0.46}$$

$$= 1.85$$

$$\frac{1}{1-0.88}$$

$$= 8.33$$

MAE

$$= \frac{\sum_{i=1}^{n} |y_a - y_p|}{n}$$

$$\frac{-10}{n} = \frac{|-33|}{3} = 3.33$$

= Medium

= robust

mean →
mode
median