

19) Data testing ke 19

Sex = male, embarked = S, age\_cat = adult, fare\_cat = Very-cheap -  
Sibling - Spouse = No, parent-child = No

a)  $P(c_i) P(\text{survived} = 1) = 48/120$   
 $= 0,66$

$P(c_i) P(\text{survived} = 0) = 24/120$   
 $= 0,33$

b)  $P(x/c_i) \text{ untuk } i = 1, 2$

-  $P(\text{Sex} = \text{male} / \text{survived} = 1) = 14/48$   
 $= 0,29$

-  $P(\text{embarked} = S / \text{survived} = 1) = 30/48$   
 $= 0,62$

-  $P(\text{age\_cat} = \text{adult} / \text{survived} = 1) = 35/48$   
 $= 0,72$

-  $P(\text{fare\_cat} = \text{No} / \text{survived} = 1) = 20/48$   
 $= 0,58$

-  $P(\text{Sibling-Spouse} = \text{No} / \text{survived} = 1) = 14/24$   
 $= 0,58$

-  $P(\text{parent-child} = \text{No} / \text{survived} = 1) = 16/24$   
 $= 0,66$

-  $P(\text{Sex} = \text{female} / \text{survived} = 1) = 14/48$   
 $= 0,29$

-  $P(\text{embarked} = C / \text{survived} = 1) = 14/48$   
 $= 0,29$

-  $P(\text{age\_cat} = \text{child} / \text{survived} = 1) = 13/48$   
 $= 0,27$

-  $P(\text{fare\_cat} = \text{Very-cheap} / \text{survived} = 1) = 15/48$   
 $= 0,31$

-  $P(\text{Sibling-Spouse} = \text{Yes} / \text{survived} = 1) = 10/24$   
 $= 0,42$

-  $P(\text{parent-child} = \text{Yes} / \text{survived} = 1) = 8/24$   
 $= 0,33$

c)  $P(x / \text{survived} = 1) = 0,29 \times 0,62 \times 0,72 \times 0,58 \times 0,45 \times 0,66$   
 $= 0,0223$

$P(x / \text{survived} = 0) = 0,29 \times 0,62 \times 0,70 \times 0,58 \times 0,66 \times 0,62 = 0,0224$

d)  $P(x / \text{survived} = 1) = 0,0223 \times 0,66 = 0,0147$

$P(x / \text{survived} = 0) = 0,0224 \times 0,33 = 0,0074$

\* Kesimpulan : Survived = 0 class 1 //