## EPPS 6313 : Recitation Session \#1

## Problem 1

Find level of measurement (median, mode, mean)

- The result of a survey for 30 people about the number of their siblings

$$
2,1,1,2,0,1,0,3,2,0,1,1,5,1,2,2,2,1,1,3,0,2,4,0,0,2,1,0,1,2
$$

- The result of a survey for 30 people about marital status ( $1=$ single, $2=$ married, $3=$ divorced $)$

$$
3,3,1,1,1,1,1,2,2,2,3,2,1,2,1,2,2,3,2,2,3,1,2,1,1,1,3,3,2,1
$$

## Problem 2

Find variance, standard deviation and range in data below.

$$
2,1,1,2,0,1,0,3,2,0,1,1,5,1,2,2,2,1,1,3,0,2,4,0,0,2,1,0,1,2
$$

## Problem 3

A is an event which is people own LCD TV, B is an event which is people own 3D TV.
We know $P(A \bigcup B)=0.92, P(A)=0.86, P(B)=0.35$
What is $P(A \bigcap B)$ ?

## EPPS 6316 : Recitation Session \#1

## Problem 1

Assume a simple regression model, $y=\beta_{0}+\beta_{1} x+u$.
$E\left(y-\beta_{0}-\beta_{1} x\right)=$
$E\left[x\left(y-\beta_{0}-\beta_{1} x\right)\right]=$

## Problem 2

Given the data on the variables X and Y .

$$
\begin{array}{c|cccccc}
\mathrm{X} & 0 & 7 & 1 & 3 & 4 & -1 \\
\hline \mathrm{Y} & 0 & 14 & 0 & 5 & 7 & -1
\end{array}
$$

(1) Calculate $\beta_{1}$ and $\beta_{2}$
(2) Calculate $E\left(u_{i} \mid X_{i}\right)$
(3) Calculate $\sum X_{i} u_{i}$
$\uparrow$ you can get a certain value. It is always same in the CLRM. You can learn the reason in the next class.

