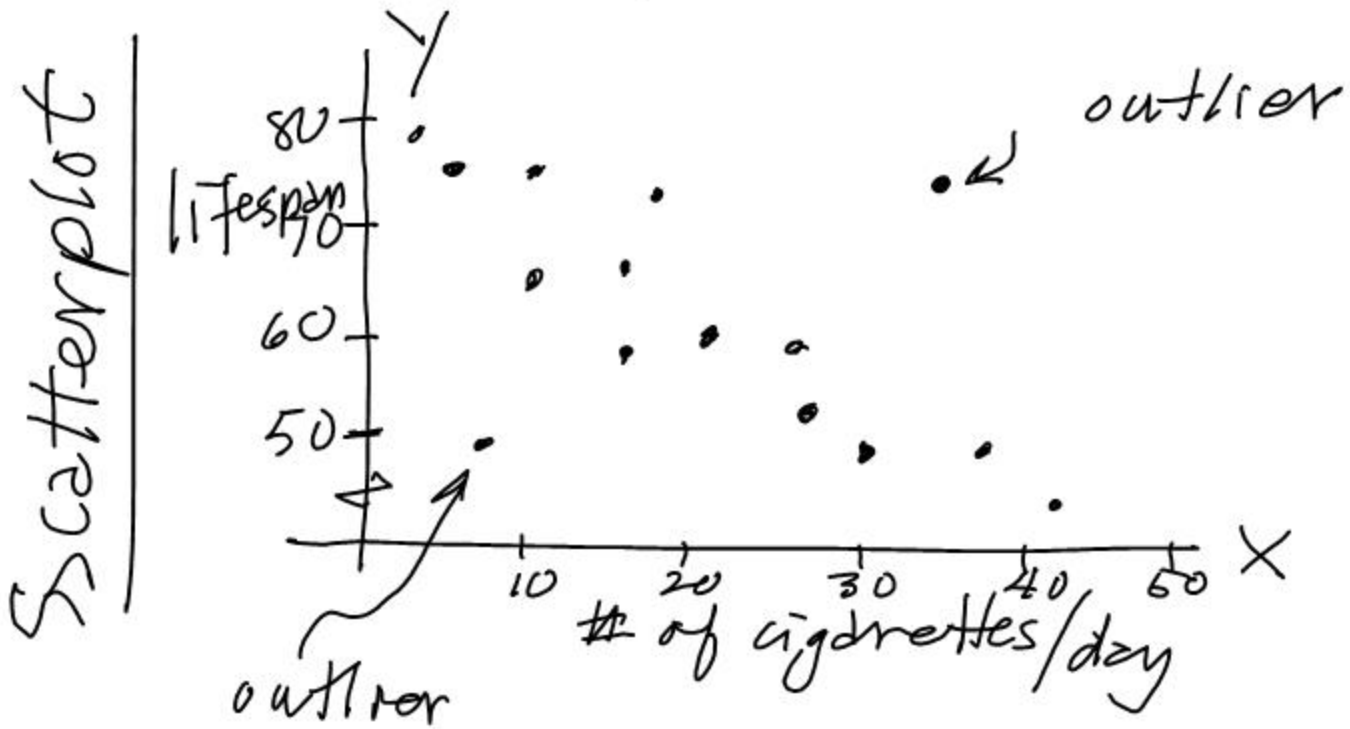


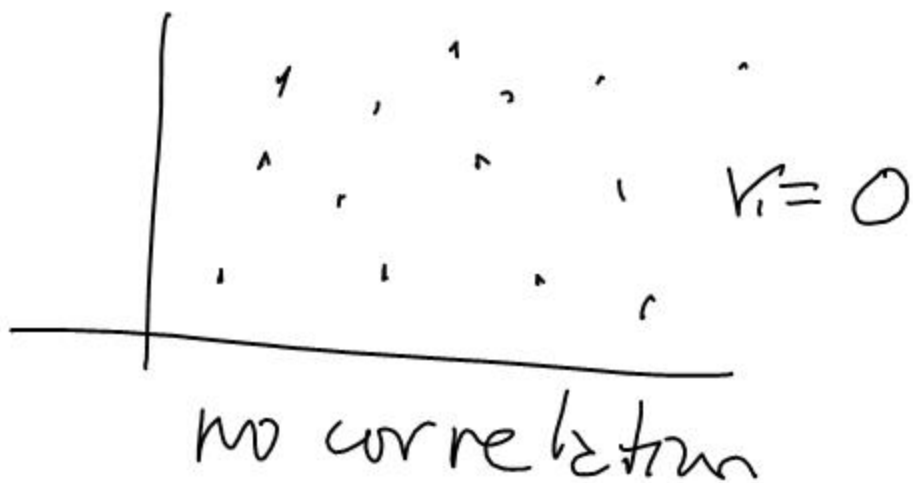
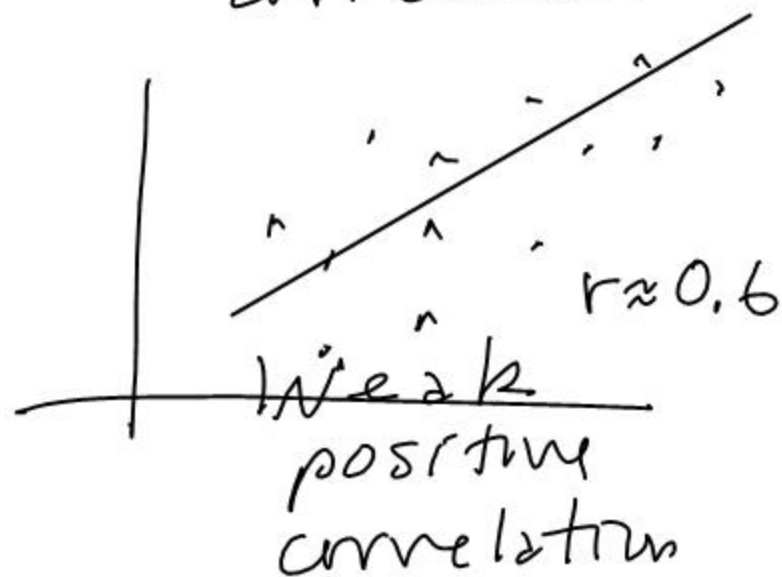
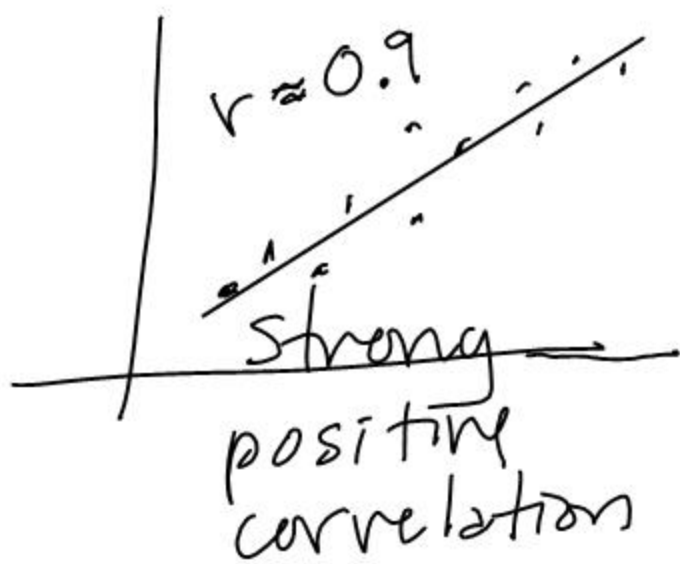
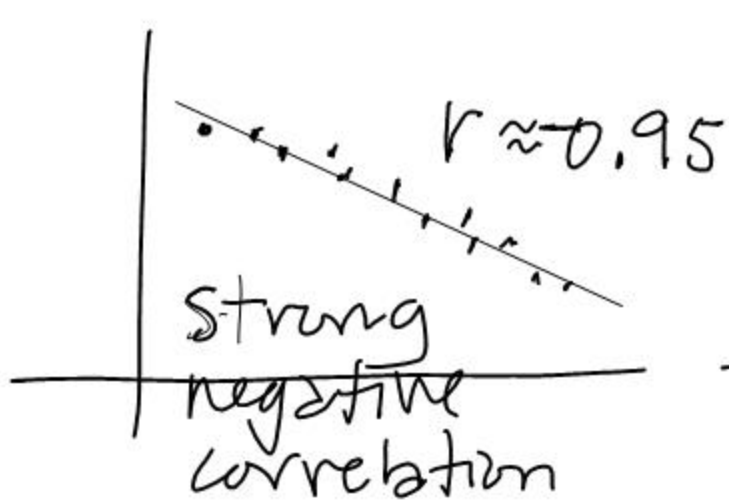
Linear Regression

Examine the relationship between 2 variables

Ex. X = the number cigarettes smoked per day

y = years lived





r = correlation coefficient

$$-1 < r < 1$$

\bar{x} = mean value of x

\bar{y} = mean value of y

$\bar{x} = 31.25$
 $\bar{y} = 32.5$ } regression
line must
pass through
this point (\bar{x}, \bar{y})