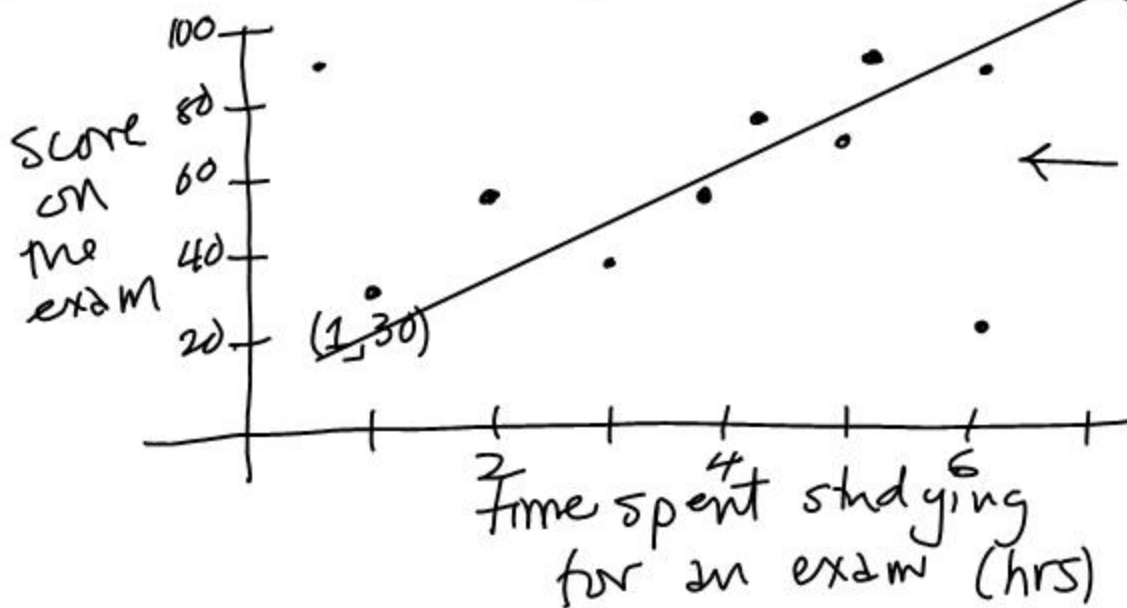


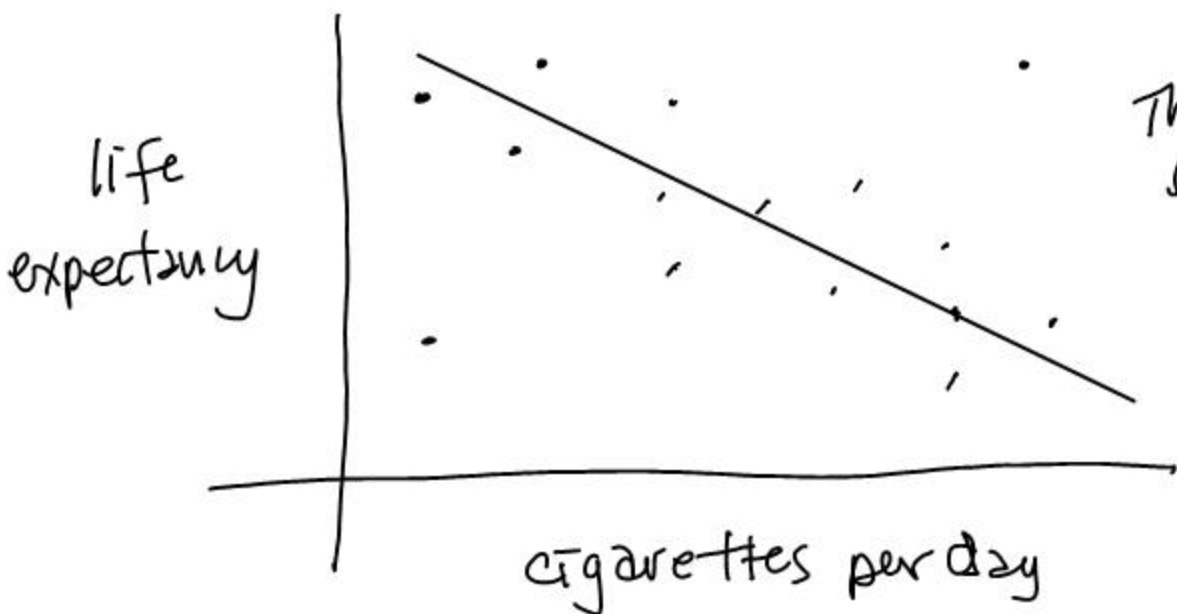
Scatterplots, Correlation, & Regression

Bivariate Data (ordered pairs)

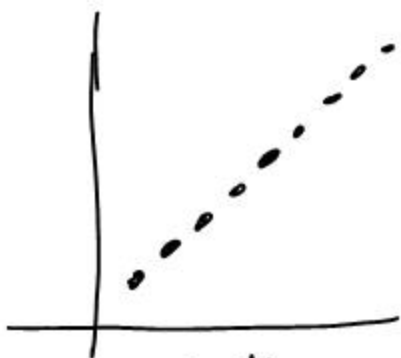


regression line

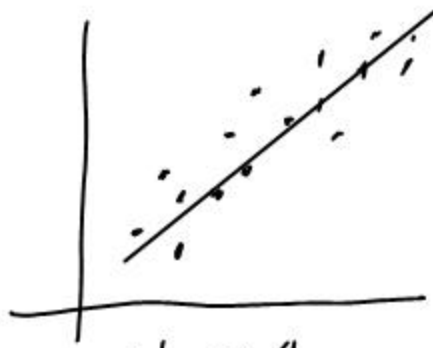
This scatterplot shows a positive correlation



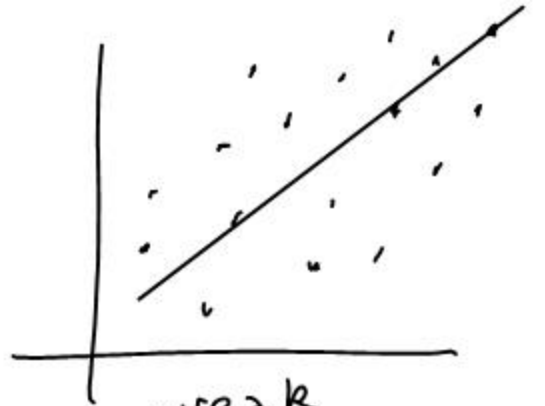
This scatterplot shows a negative correlation



perfect
positive
correlation
 $r=1$

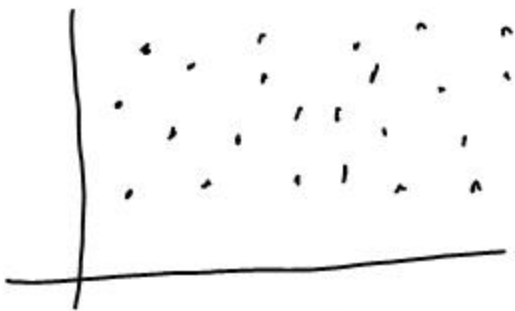


strong
positive
correlation
 $r=0.8$



weak
positive
correlation
 $r=0.5$

The correlation coefficient: r
A measure of how strong a correlation is



$r=0$



$r=0$

(non-linear correlation)

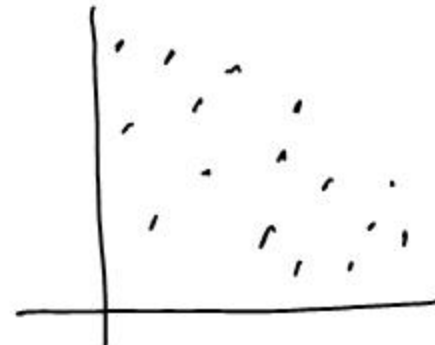


$r=-1$

perfect
negative
correlation



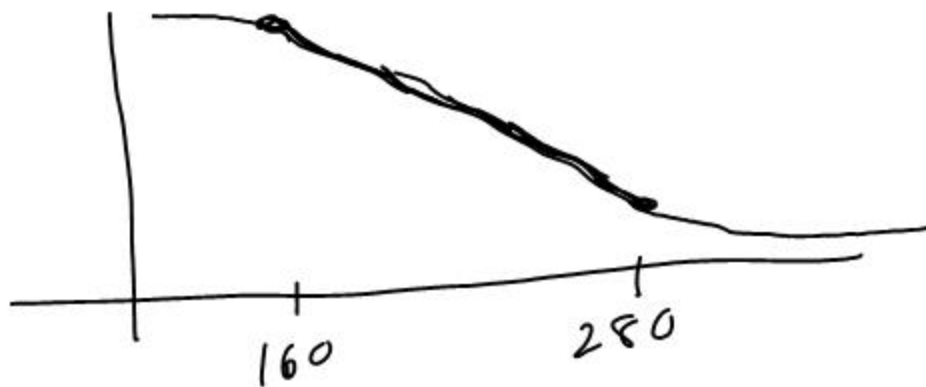
$r=-0.8$



$r=-0.5$

10C #2) $\bar{x} = 220$
 $\bar{y} = 75.4$ } The mean point
 (220, 75.4)
 must be on the
 regression line

How many homes will sell for £320,000?
 We can't answer this question. Trying to do
 so is called extrapolation.



10E #1

dependent
variable

independent
variable

#W 10A #1-4

10E #3

Hi, Do your hw. 😊

No Delayed opening