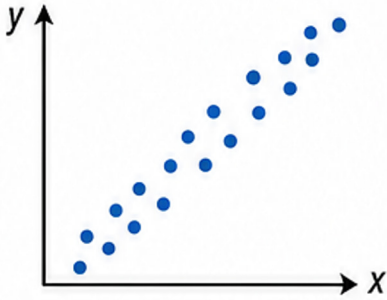


SCATTER PLOT CORRELATION CARDS



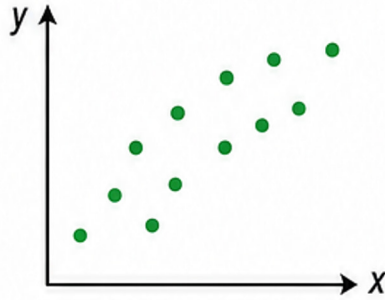
1 STRONG POSITIVE CORRELATION



As x increases, y increases.

r is close to $+1$

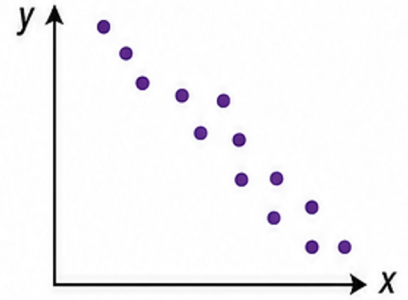
2 MODERATE POSITIVE CORRELATION



As x increases, y tends to increase.

r is between 0 and $+1$

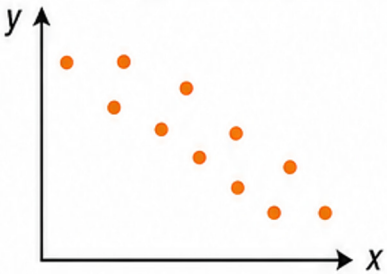
3 STRONG NEGATIVE CORRELATION



As x increases, y decreases.

r is close to -1

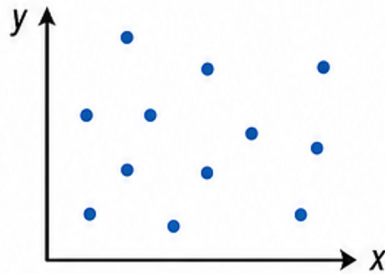
4 MODERATE NEGATIVE CORRELATION



As x increases, y tends to decrease.

r is between -1 and 0

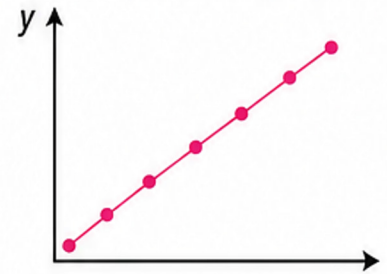
5 NO CORRELATION



No clear relationship between x and y .

r is close to 0

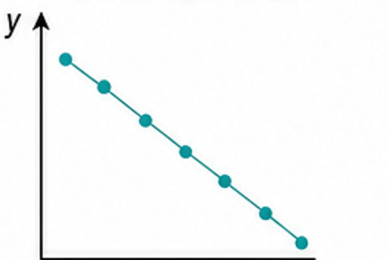
6 PERFECT POSITIVE CORRELATION



All points lie on a straight line sloping up.

$r = +1$

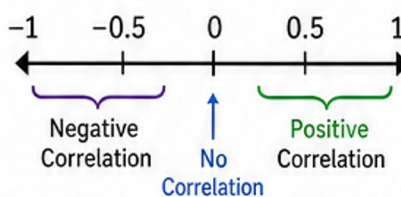
7 PERFECT NEGATIVE CORRELATION



All points lie on a straight line sloping down.

$r = -1$

8 CORRELATION COEFFICIENT (r)



r describes the **direction** and **strength** of a linear relationship.

9 THINGS TO REMEMBER



Positive correlation: points rise from left to right.



Negative correlation: points fall from left to right.



No correlation: points show no clear pattern.



Correlation \neq Causation. One variable does not cause the other.

