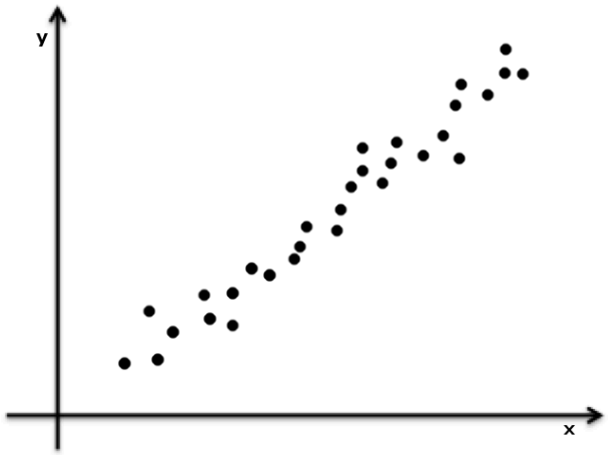
Estimating ‘r’ scores

1. Estimate the linear correlation coefficient (‘r’ score) for the scatter-plot shown below



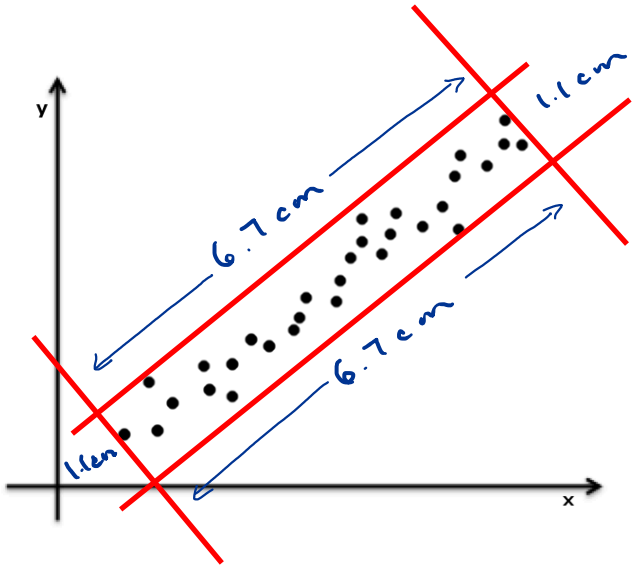
2. Estimate the linear correlation coefficient (‘r’ score) for the scatter-plot shown below

Estimating 'r' scores

$$r = 1 - \frac{\text{SHORT SIDE}}{\text{LONG SIDE}}$$

- ANSWER IS POSITIVE IF THE LINE TRENDS UPWARD
- ANSWER IS NEGATIVE IF THE LINE TRENDS DOWNWARD.

1. Estimate the linear correlation coefficient ('r' score) for the scatter-plot shown below



POSITIVE SLOPE

↓

ANSWER IS POSITIVE.

$r = 1 - \frac{\text{SHORT}}{\text{LONG}}$

$= 1 - \frac{1.1}{6.7}$

$= 1 - 0.164$

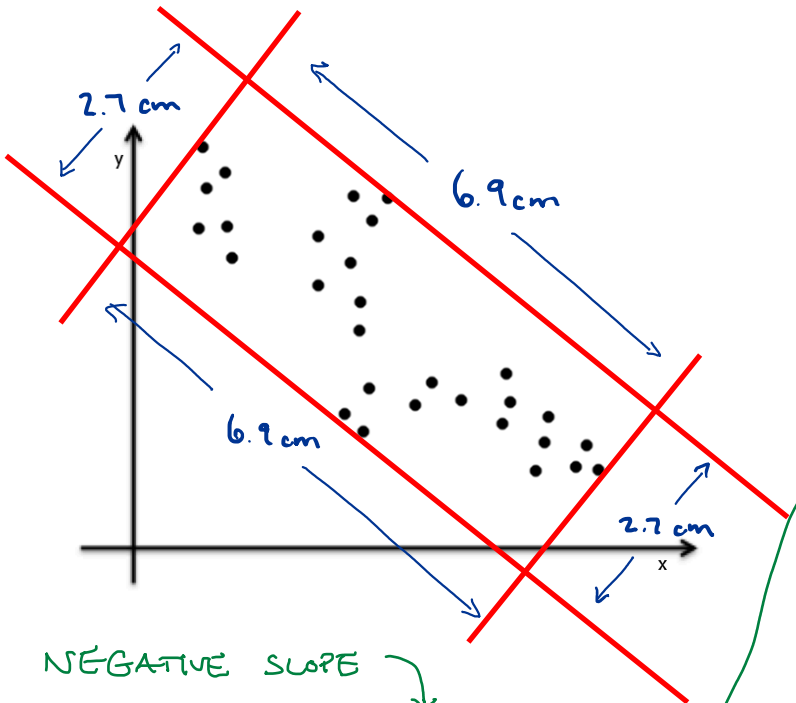
$= 0.836$

$r \approx 0.84$

ACCEPT VALUES FROM:

0.79 to 0.89

2. Estimate the linear correlation coefficient ('r' score) for the scatter-plot shown below



NEGATIVE SLOPE

↓

ANSWER IS NEGATIVE.

$r = 1 - \frac{\text{SHORT}}{\text{LONG}}$

$= 1 - \frac{2.7}{6.9}$

$= 1 - 0.391$

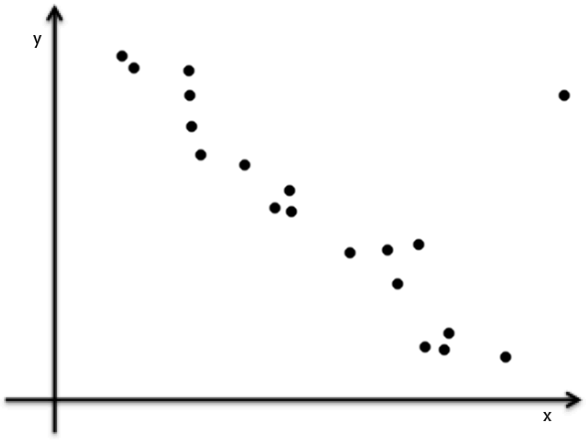
$= 0.609$

$r \approx -0.61$

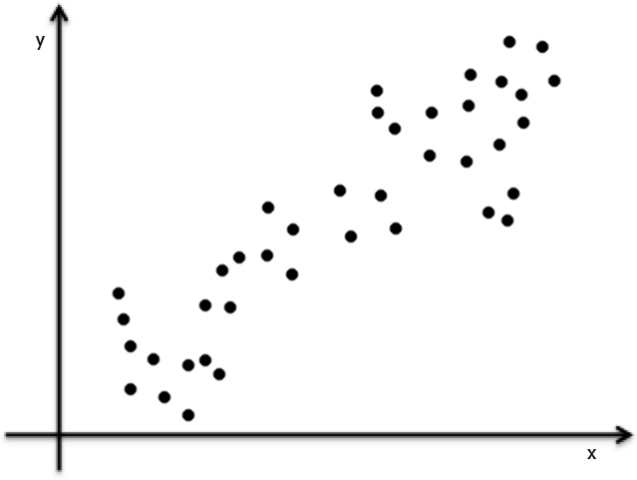
ACCEPT VALUES FROM:

−0.56 to −0.66

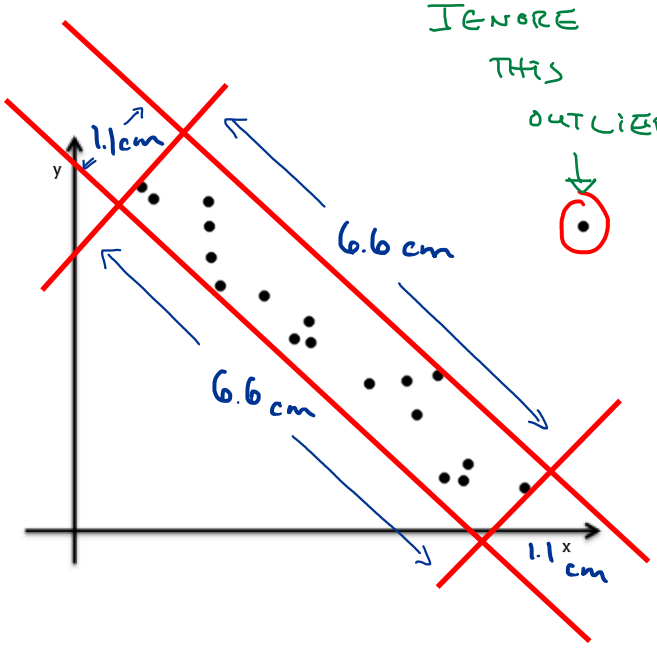
3. Estimate the linear correlation coefficient (‘r’ score) for the scatter-plot shown below



4. Estimate the linear correlation coefficient (‘r’ score) for the scatter-plot shown below



3. Estimate the linear correlation coefficient ('r' score) for the scatter-plot shown below



$r = 1 - \frac{\text{SHORT}}{\text{LONG}}$

$= 1 - \frac{1.1}{6.6}$

$= 1 - 0.1\overline{6}$

$= 0.8\overline{3}$

$r \approx -0.83$

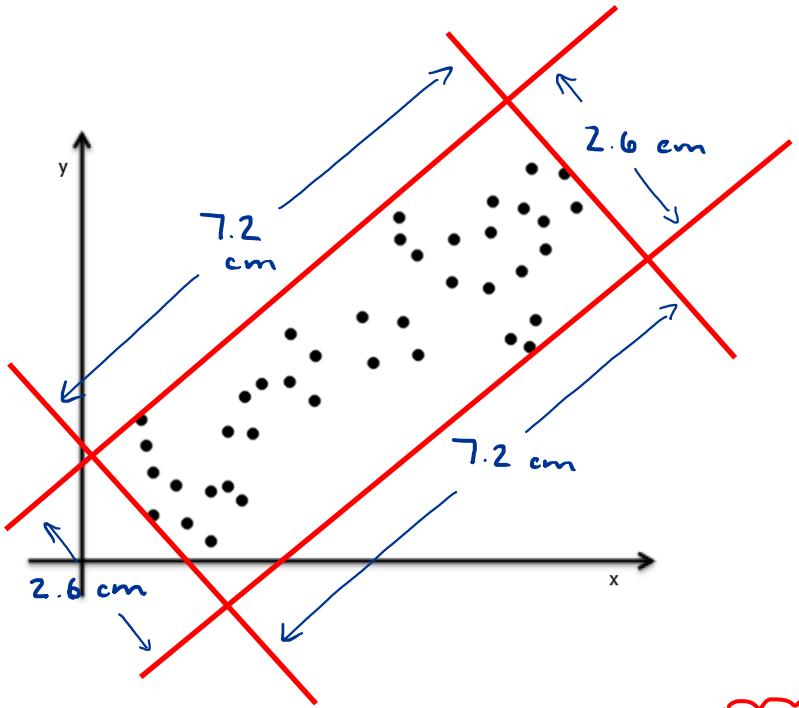
NEGATIVE SLOPE,

ANSWER IS NEGATIVE

ACCEPT VALUES FROM:

-0.78 to -0.88

4. Estimate the linear correlation coefficient ('r' score) for the scatter-plot shown below



$r = 1 - \frac{\text{SHORT}}{\text{LONG}}$

$= 1 - \frac{2.6}{7.2}$

$= 1 - 0.361$

$= 0.638$

$r \approx 0.64$

POSITIVE SLOPE,

ANSWER IS POSITIVE

ACCEPT VALUES FROM:

0.59 to 0.69