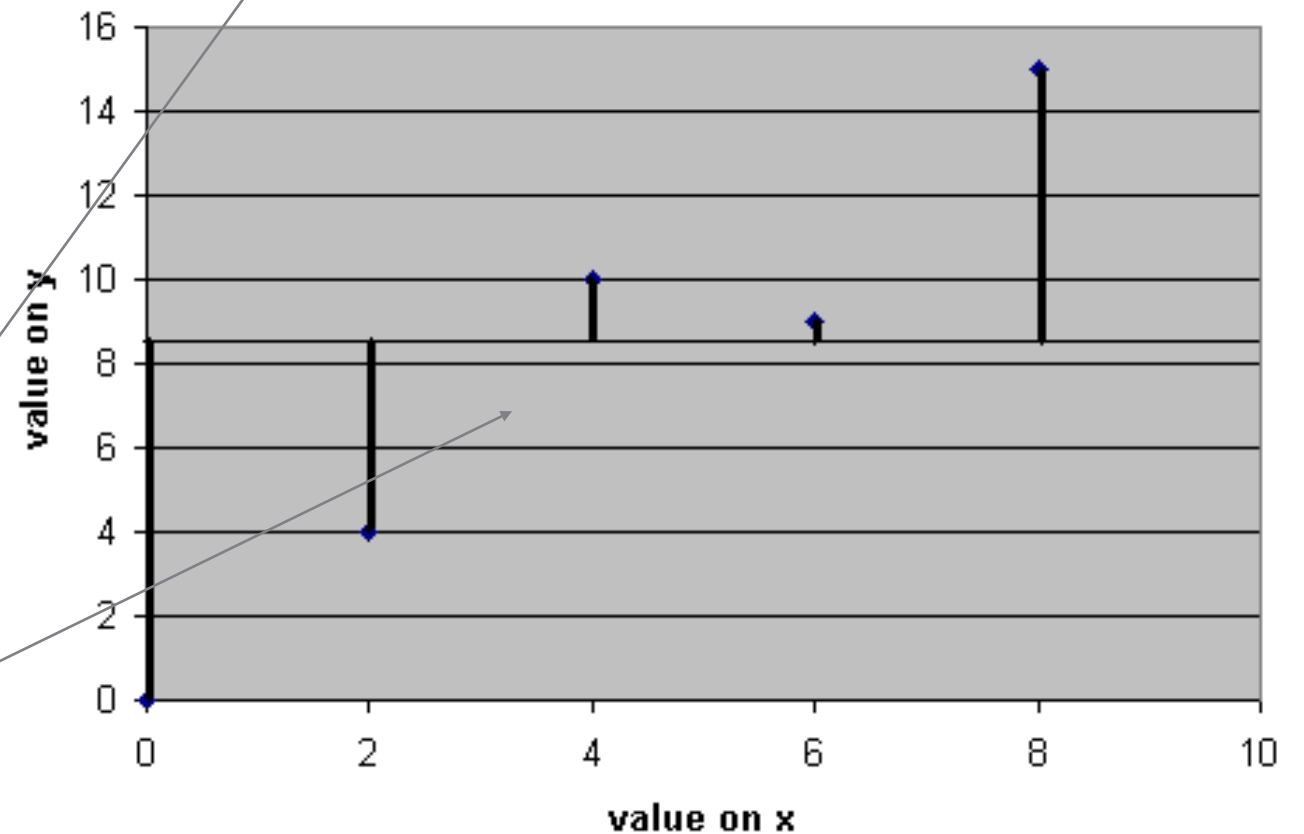


We can see that this line seems to be the best fit as it leads to the least error between the predicted data (the line) and our observed data (the points).

These two lines aren't much good as they lead to a lot of error between predicted and observed data.



# How do we determine how good a fit our line is ?

- We could work out by how much each observed value differs from the mean of  $y$ .
- We could work out by how much each observed value differs from the regression line.
- We could work out by how much the mean value of  $y$  differs from the regression line (for different values of  $x$ ).