

Mathematics

# Correlation - Worksheet

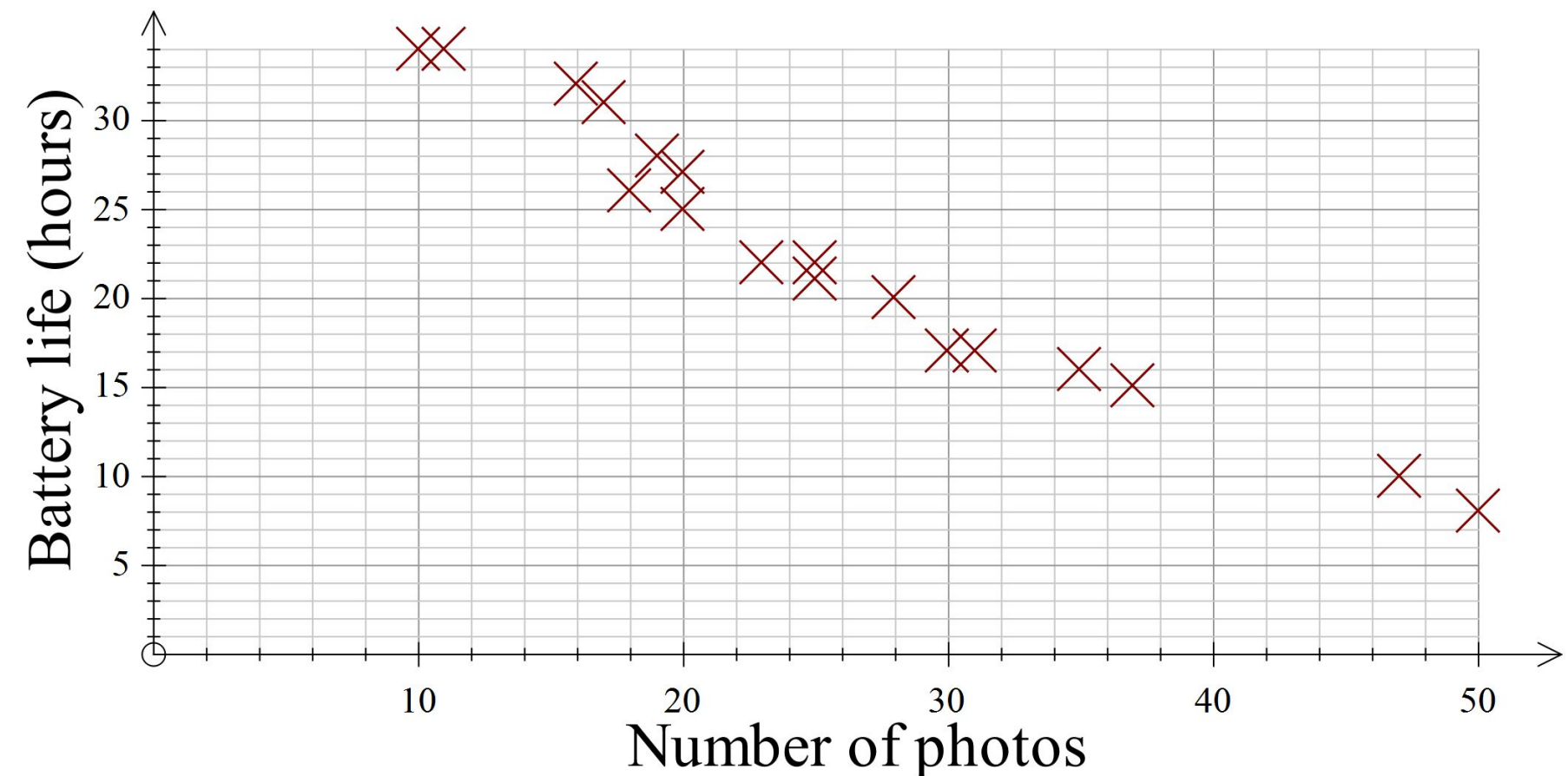
Mr Millar



**OAK**  
NATIONAL  
ACADEMY

# Try this

How could you describe the connection between the variables shown on the scatter graph?



How many way can you complete the sentence frame?

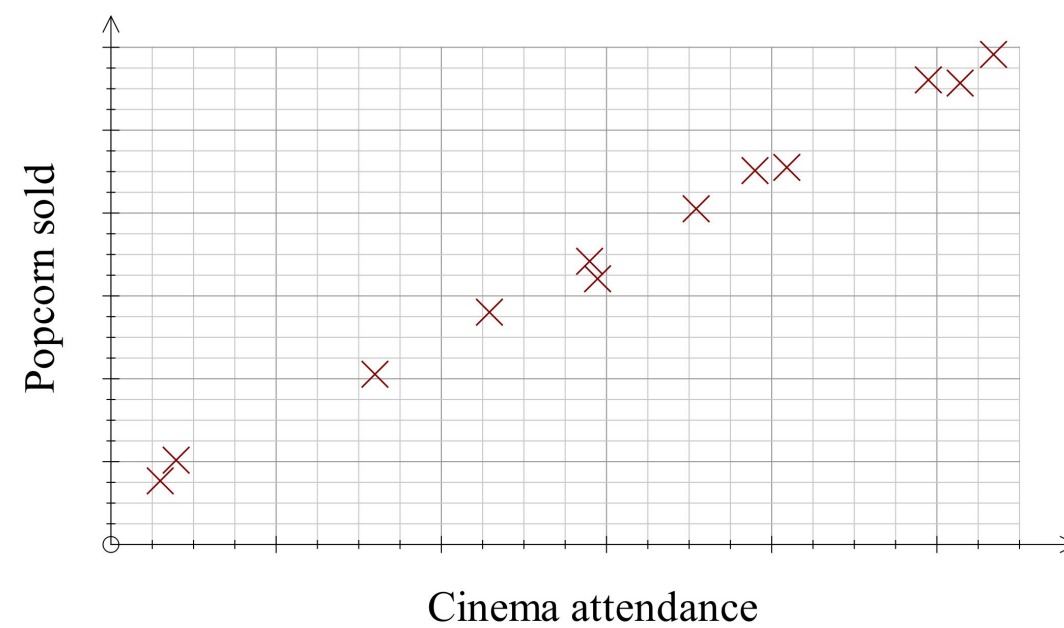
As the \_\_\_\_\_ increases/decreases, the \_\_\_\_\_ increases/decreases.



# Connect

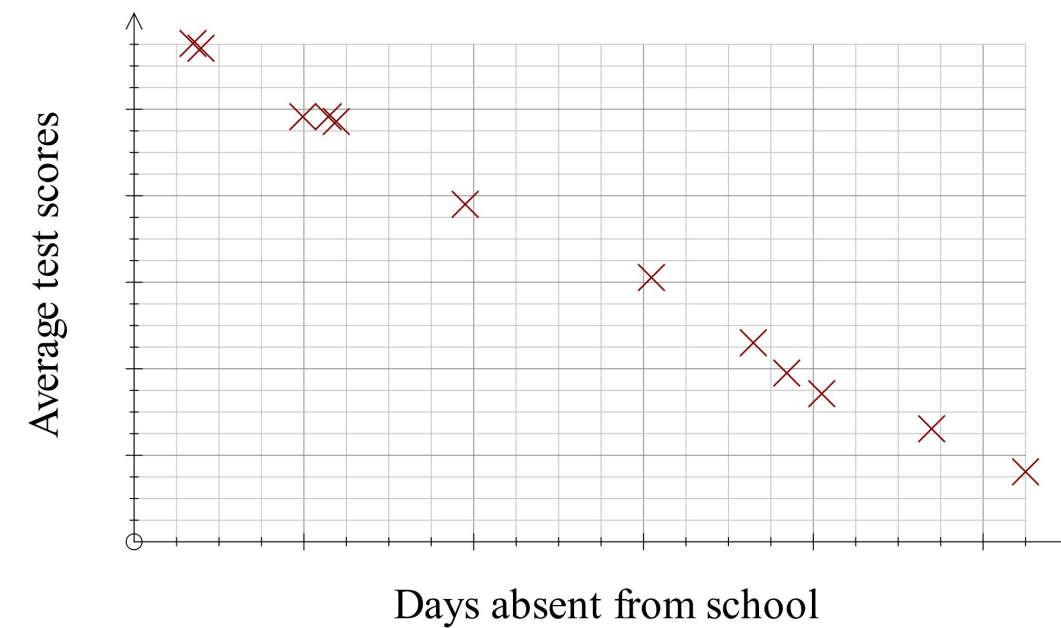
No questions here, but useful for next questions

## Positive Correlation



As one variable increases,  
so does the other

## Negative Correlation



As one variable increases  
the other decreases

## No Correlation

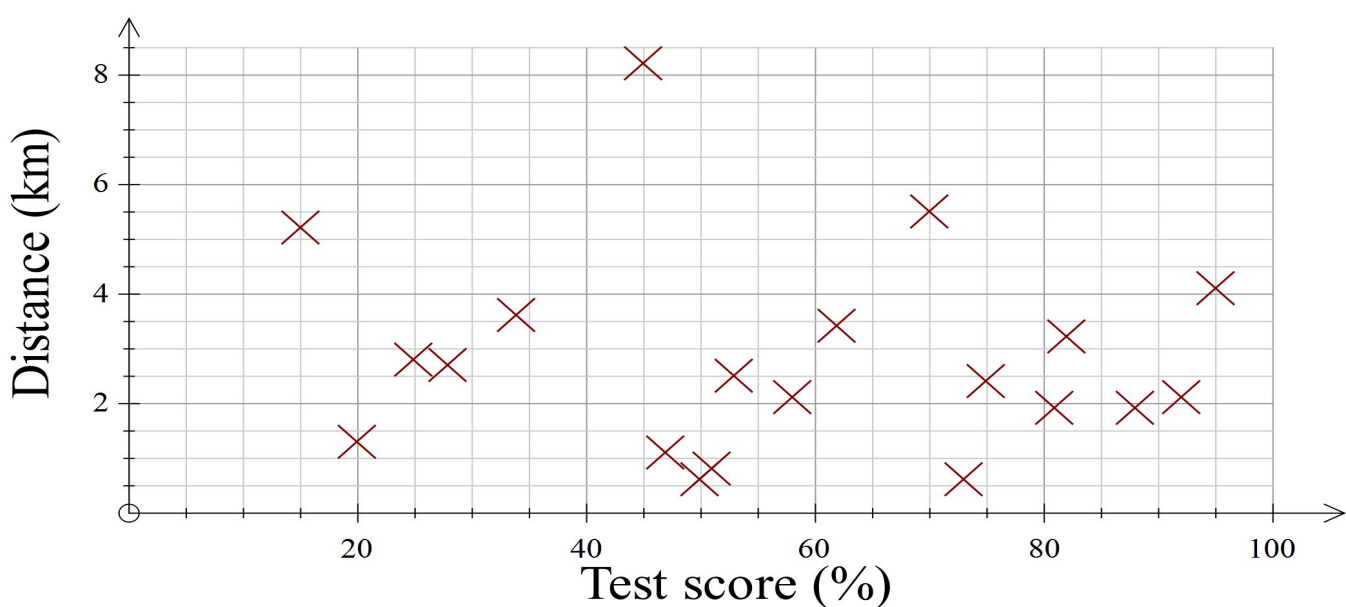
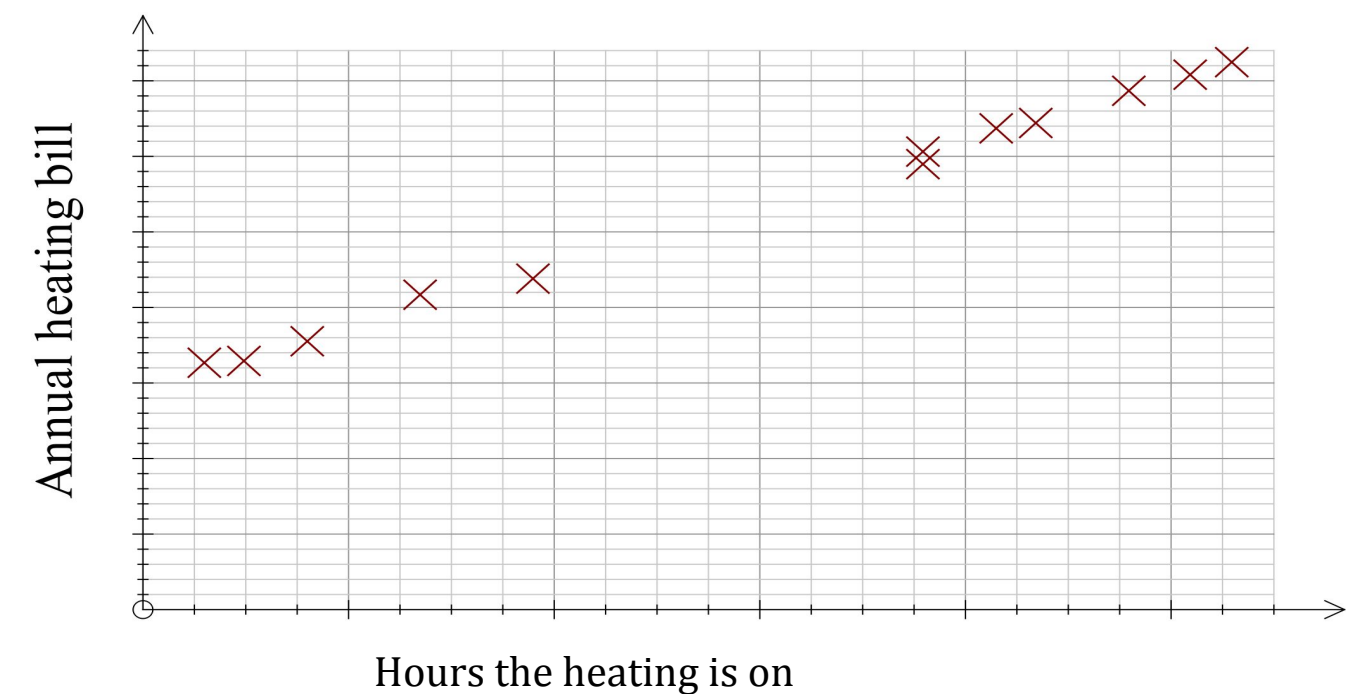


No apparent pattern  
between the two variables

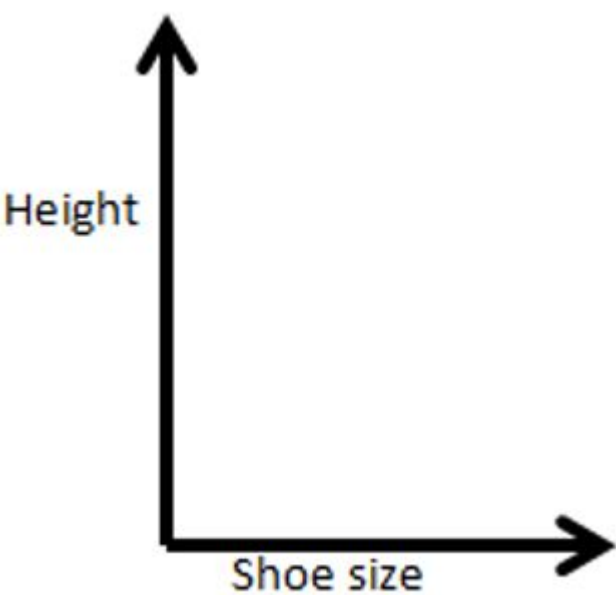
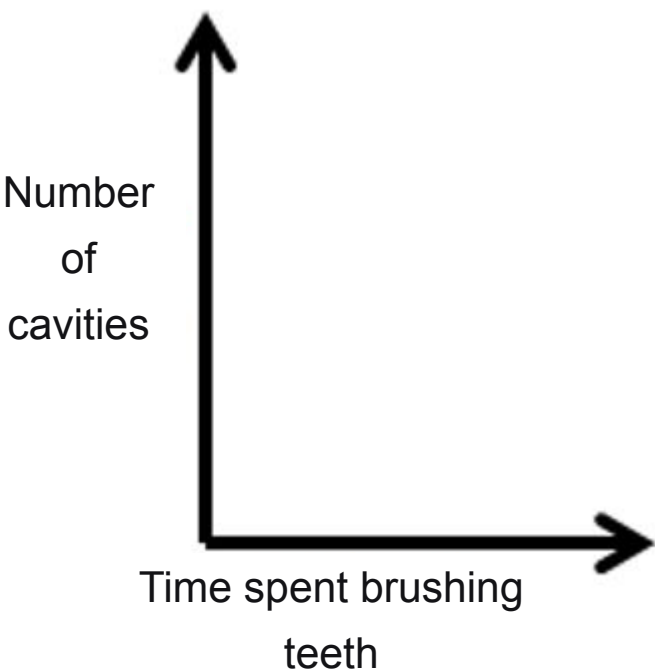
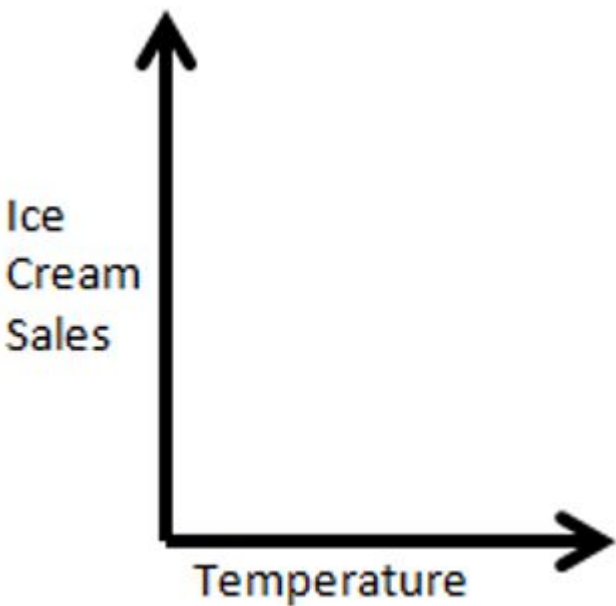
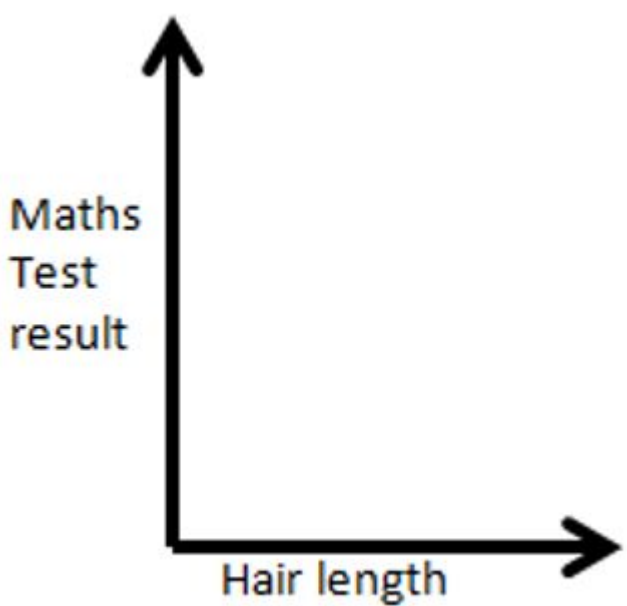


# Independent task

1. Write a sentence explaining what each graph is showing, and the type of correlation

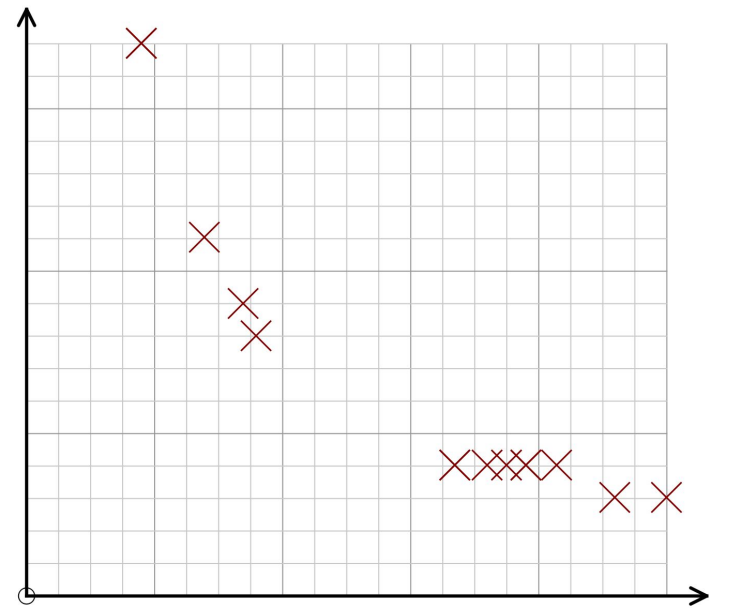
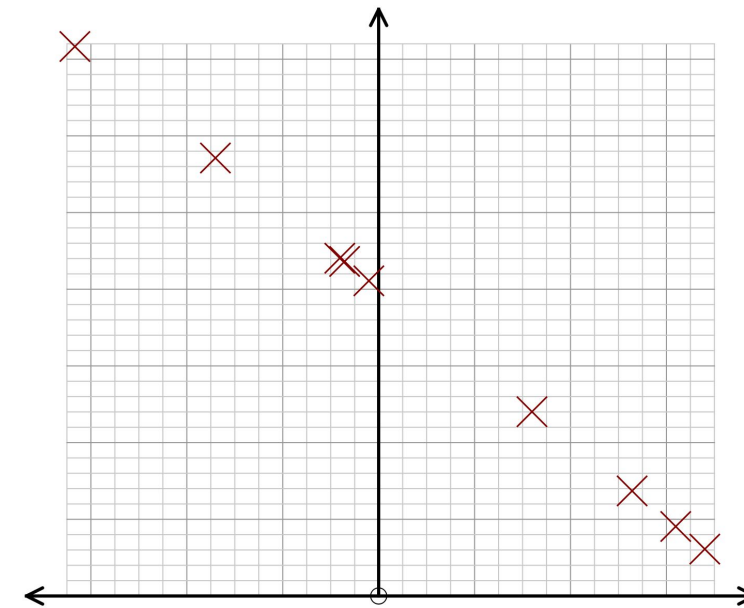
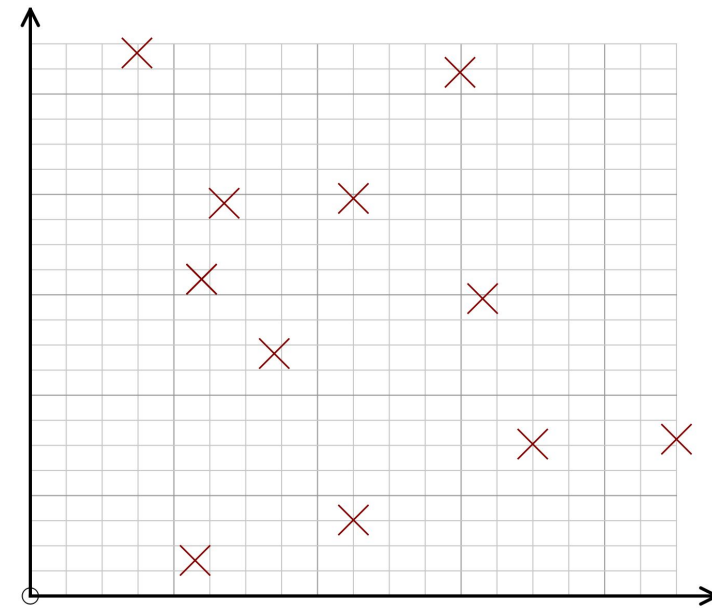
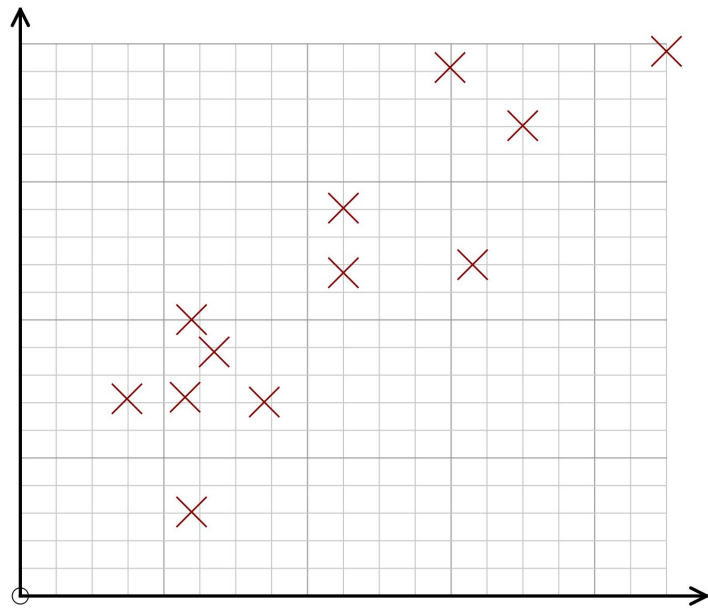
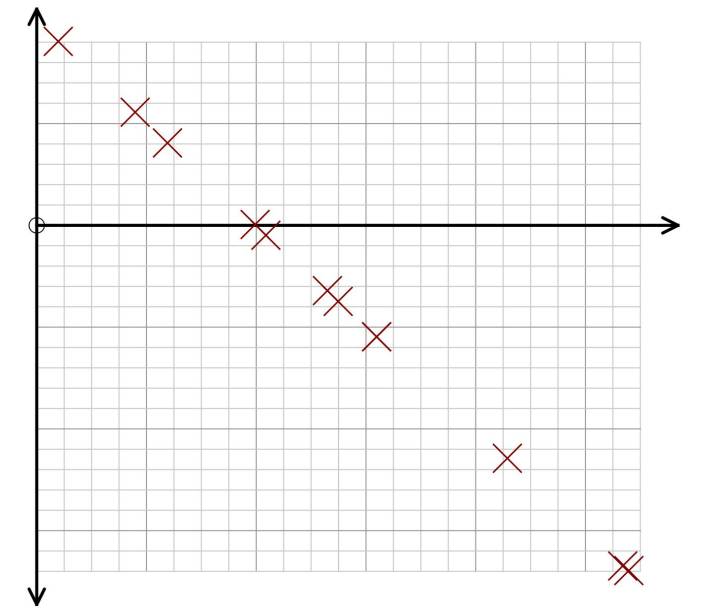
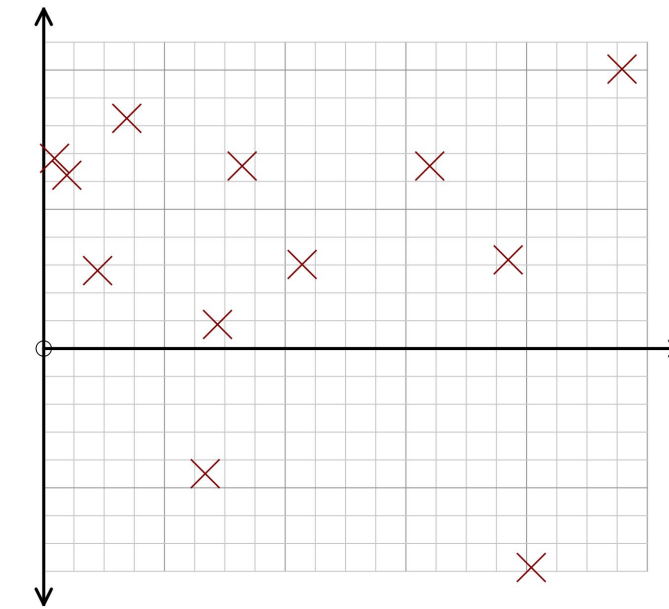
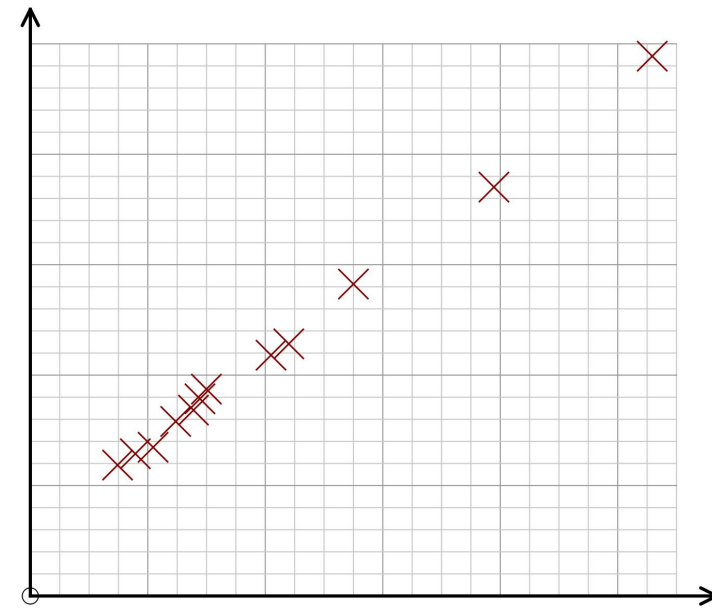
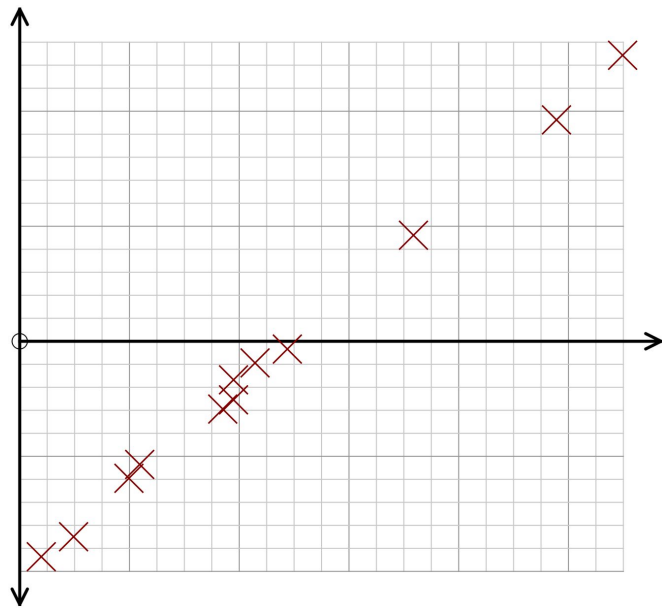


2. On each set of axes plot 8-10 points based on the correlation you would expect to find.



# Explore

Sort these graphs into groups based on the correlation shown.  
Place them in order by strength of correlation. Think of variables that might match each graph.

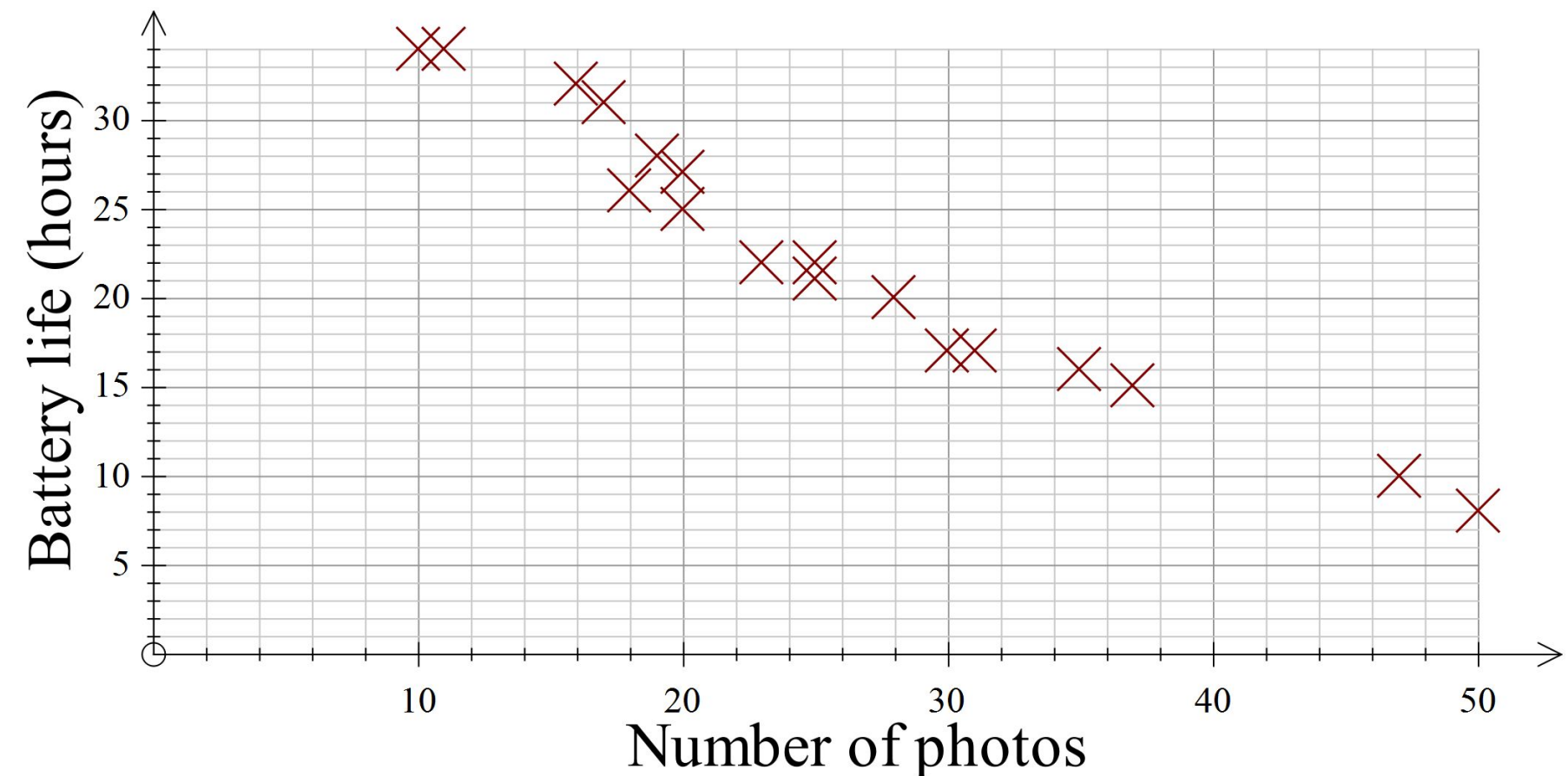


# Answers



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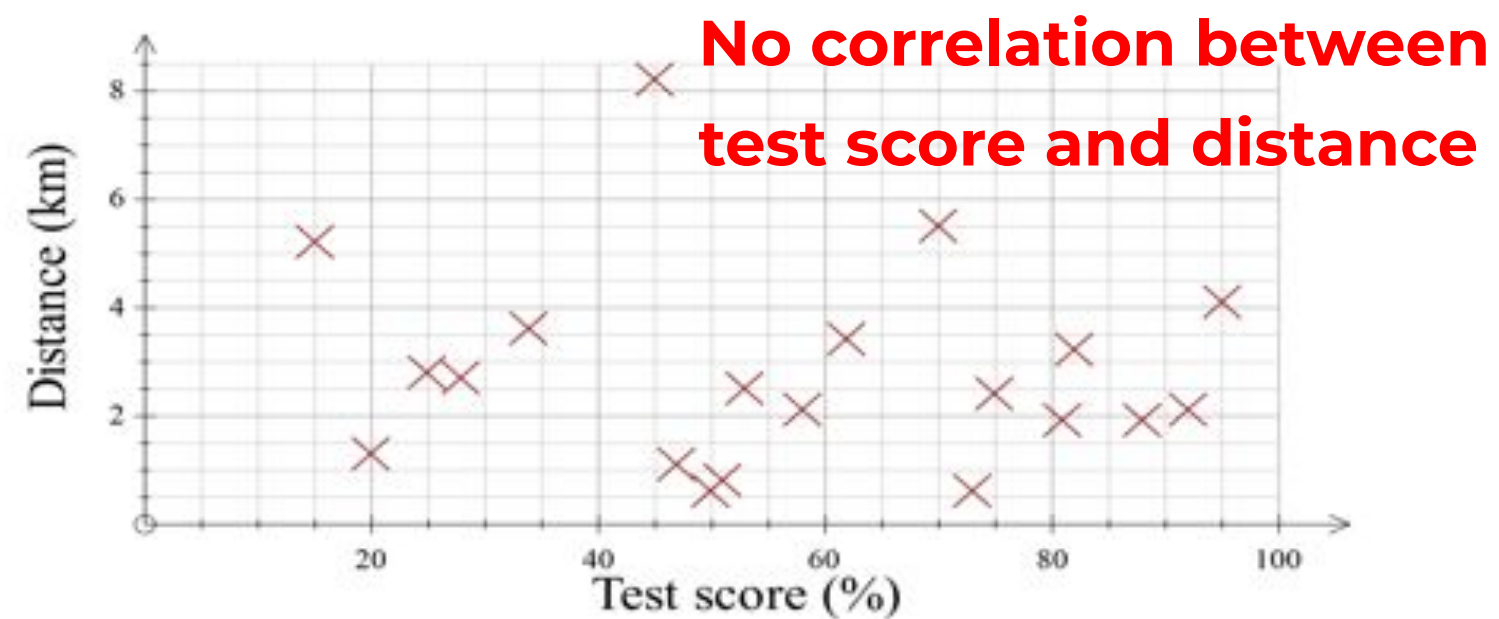
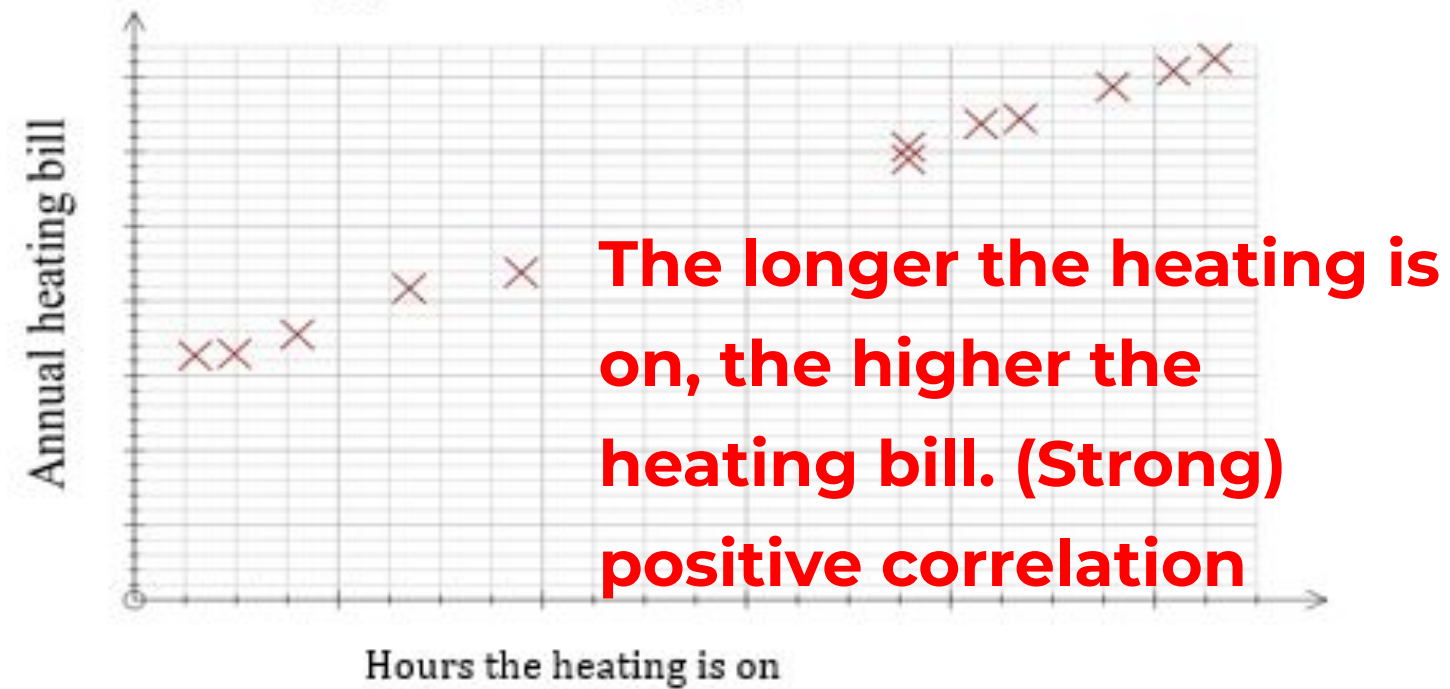
As the number of photos increases, the battery life decreases.



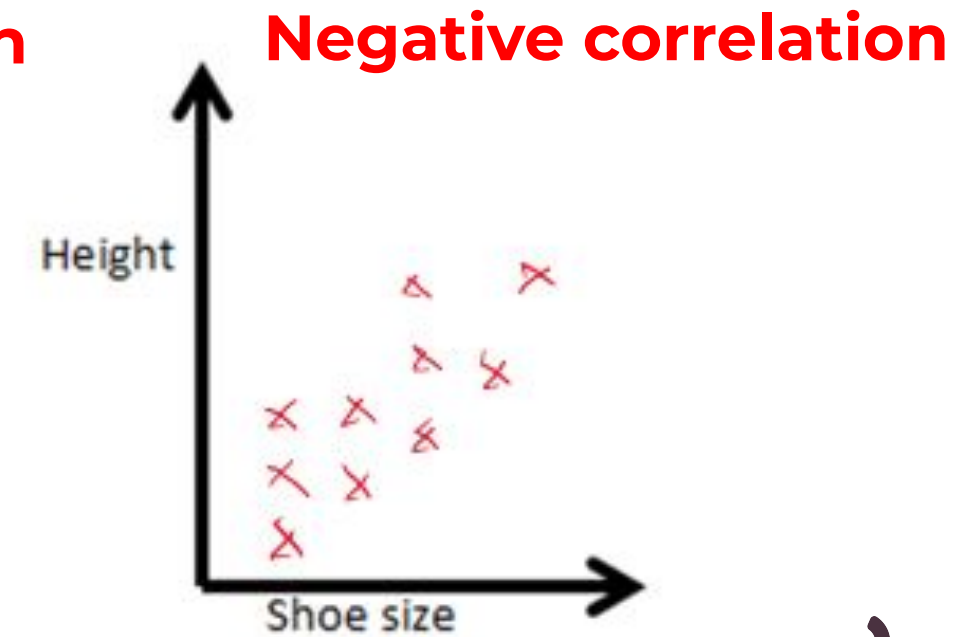
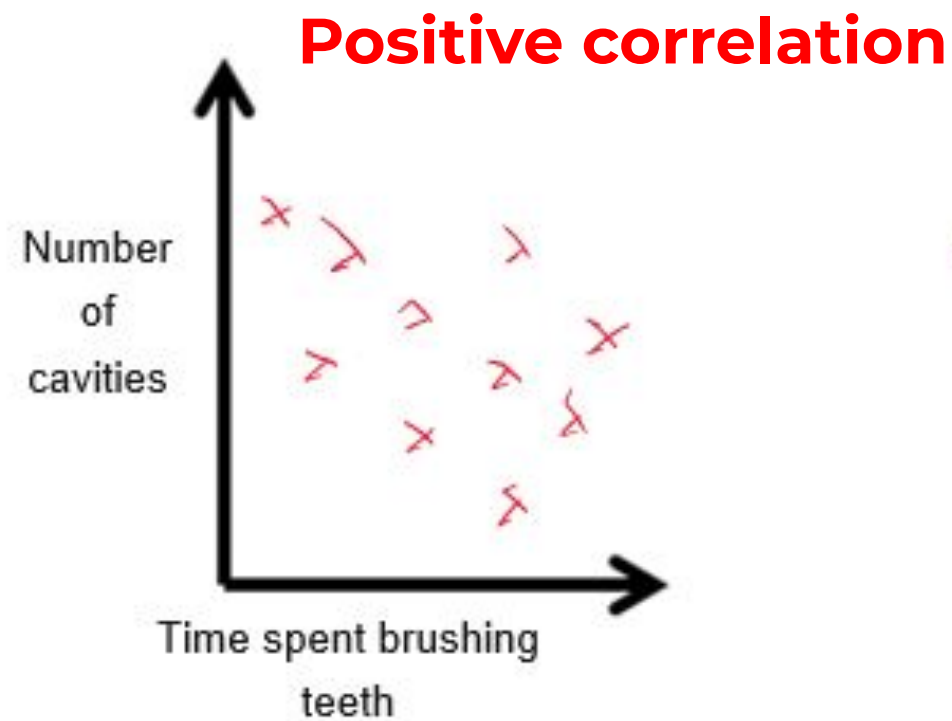
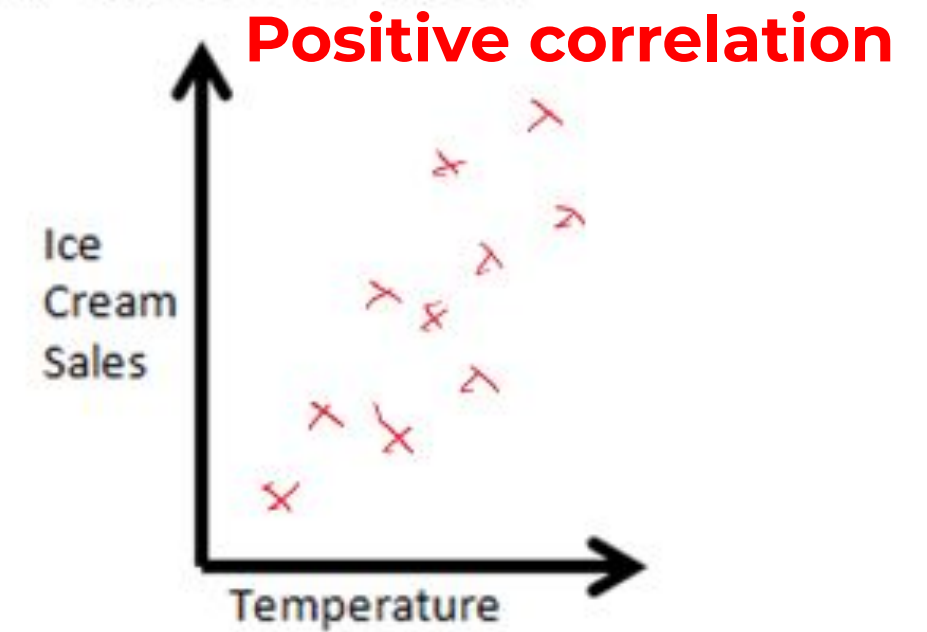
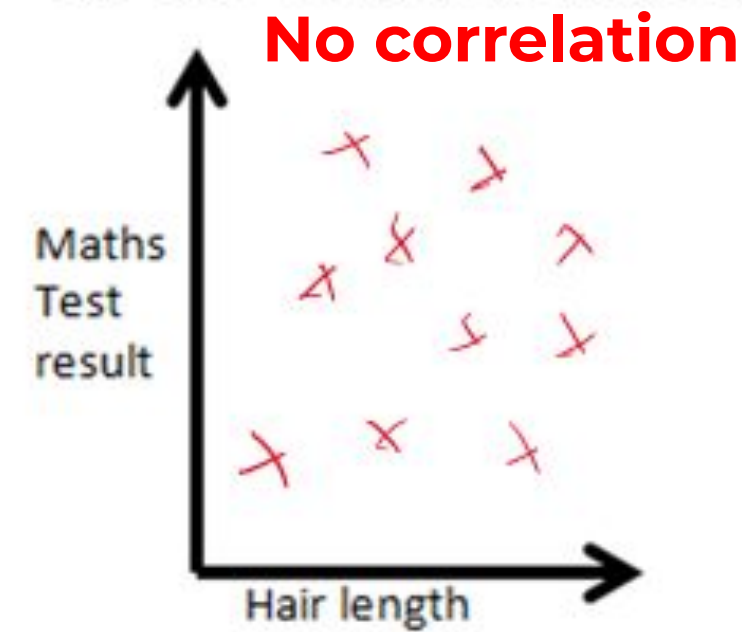


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