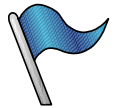


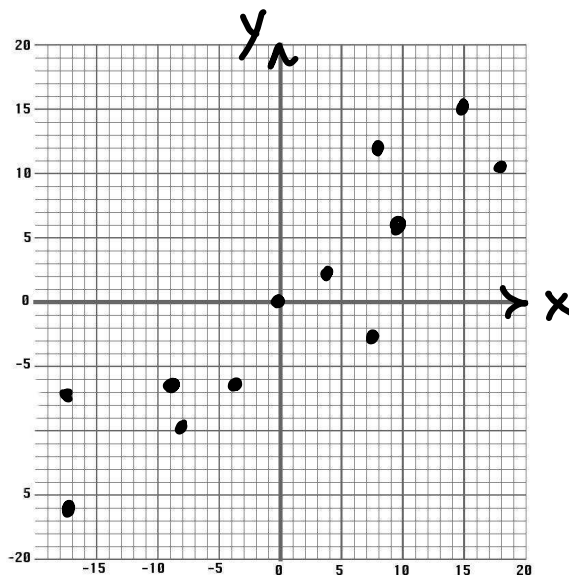
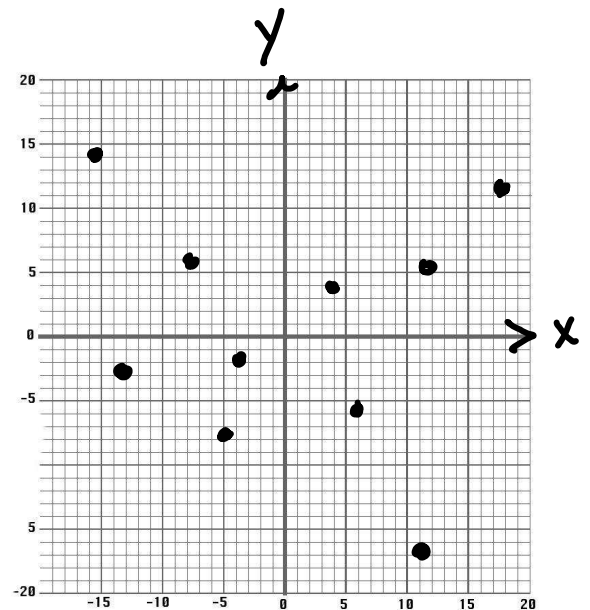
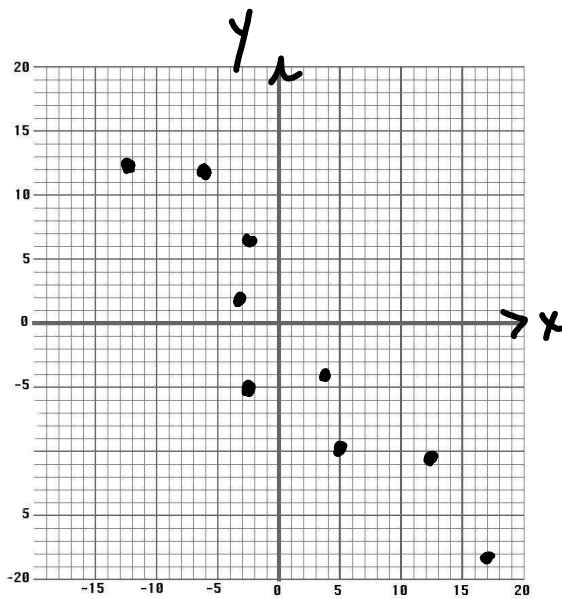
# Writing an Equation of the "Best" Fitting Line (Scatter Plots)



*Example Set: A*



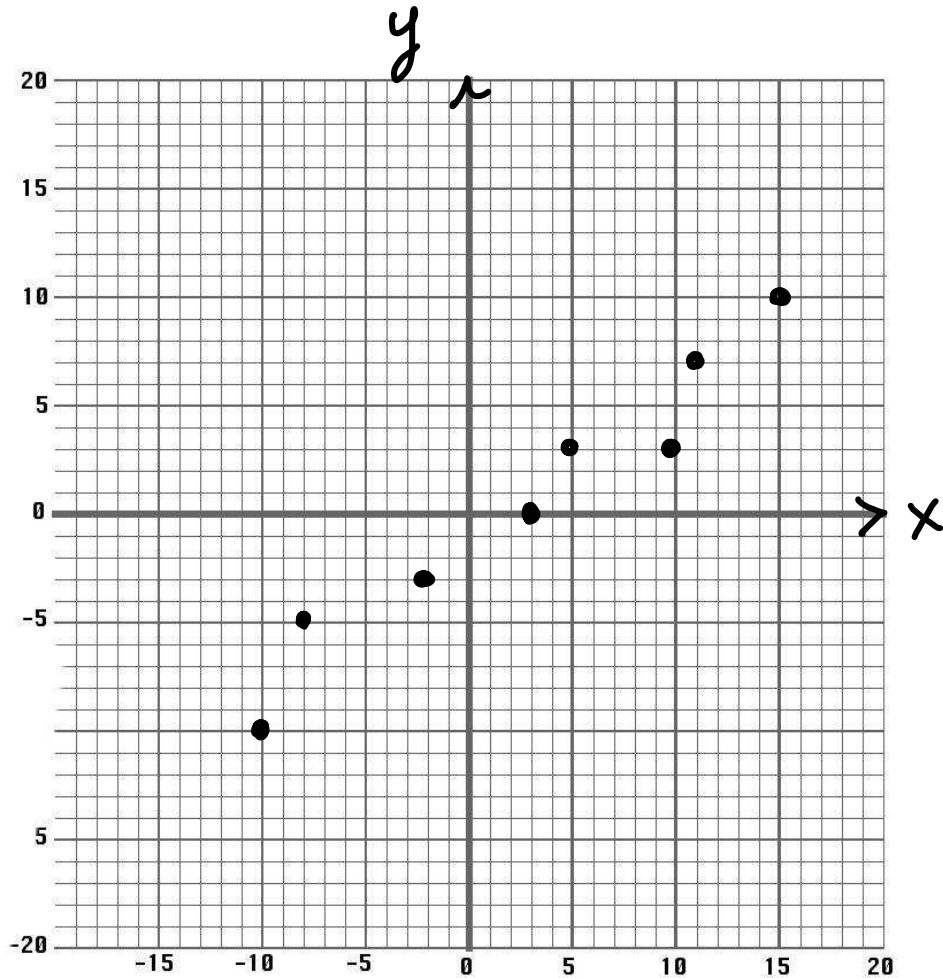
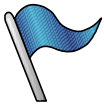
Decide if the data has a linear relationship. Also, determine the correlation of the scatter plot.

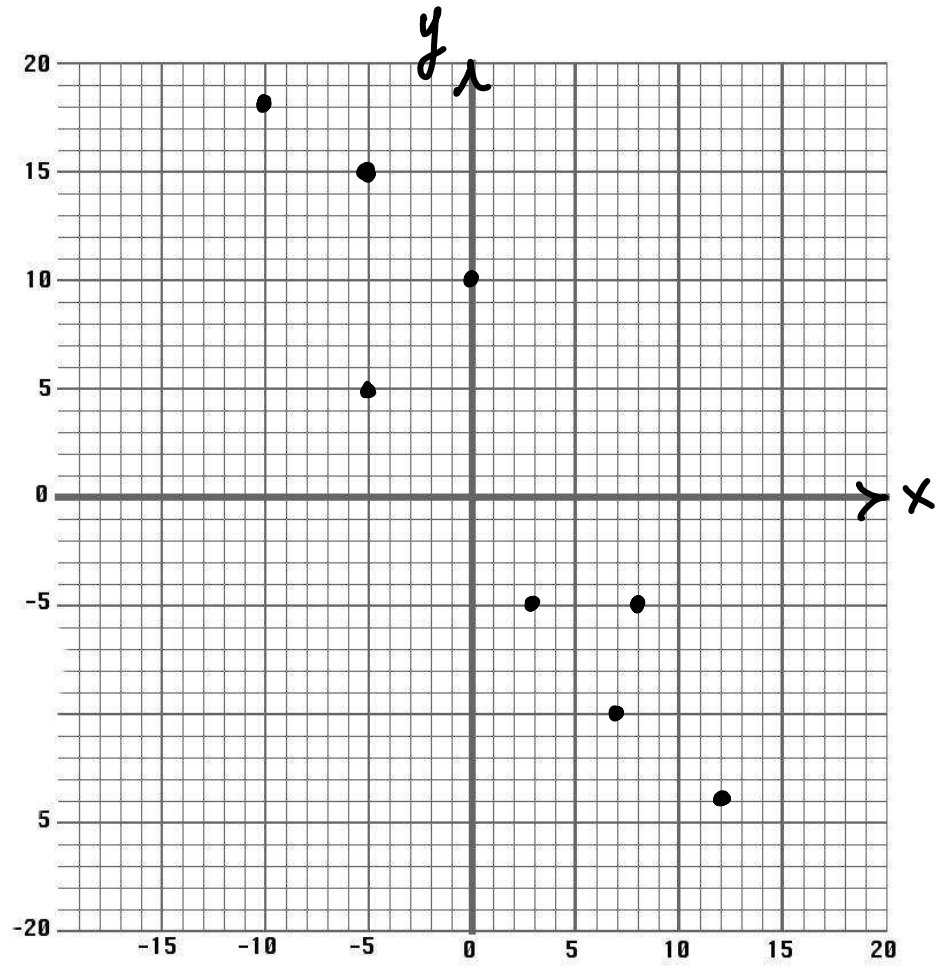
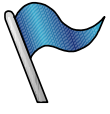




## Example Set: B

Estimate the best-fitting line for the scatter plot. State the correlation of the data.







## Example Set: C



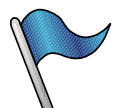
Hawk population in Hewitt, NJ has been decreasing over the last few decades. Use the data given to find a linear model for the Hawk population, then use the model to estimate what year the birds will be gone in Hewitt, NJ

Year	Hawk Population
1980	1900
1985	1500
1990	1200
1995	800
2000	600

# Writing an Equation of the "Best" Fitting Line (Scatter Plots)

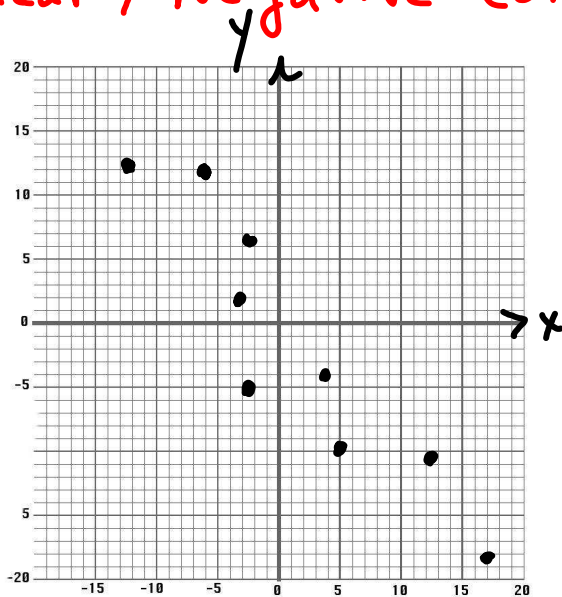


Example Set: A

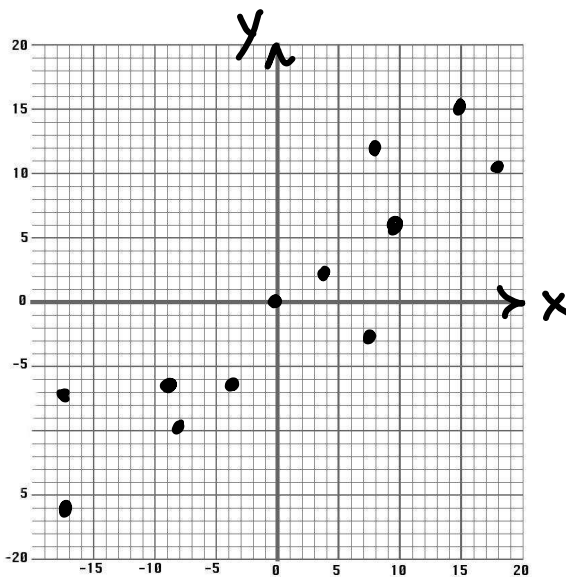
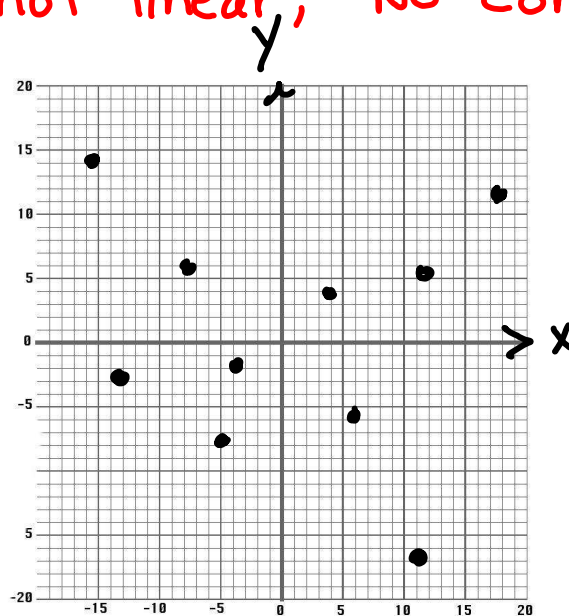


Decide if the data has a linear relationship. Also, determine the correlation of the scatter plot.

linear, negative cor.



not linear, no cor.

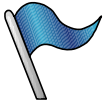


linear,  
positive cor.



## Example Set: B

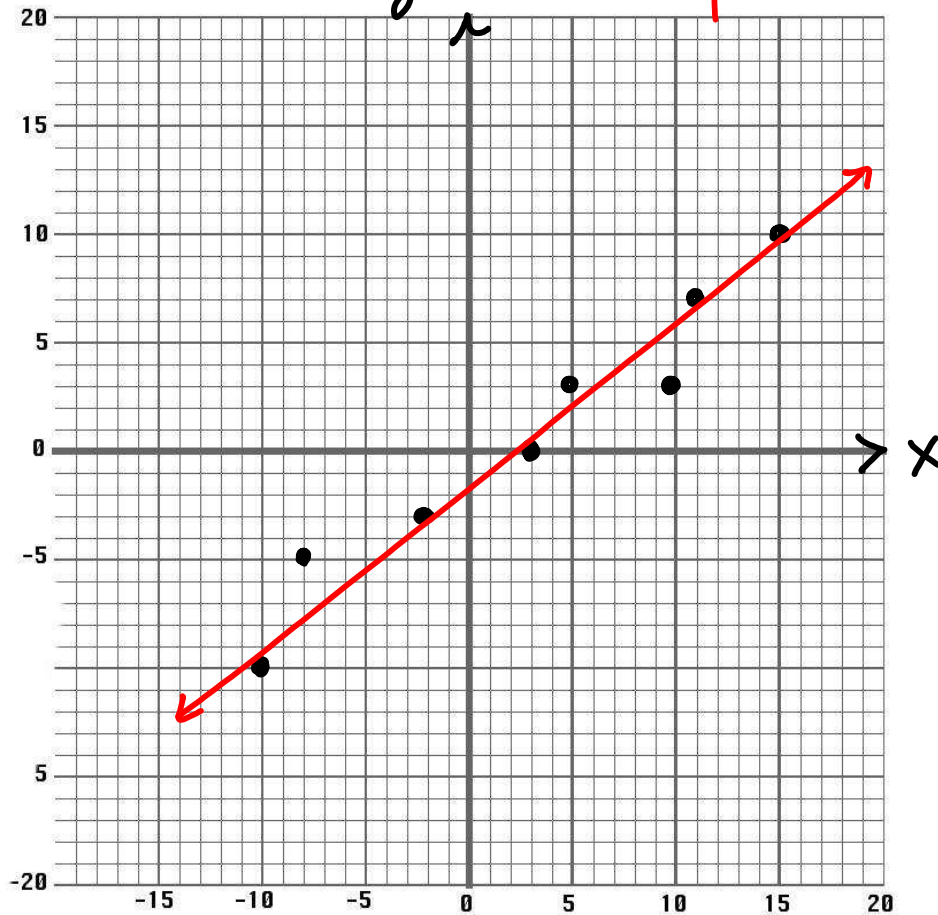
Estimate the best-fitting line for the scatter plot. State the correlation of the data.

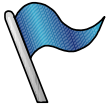


$$y = \frac{3}{4}x - 2.5$$

y

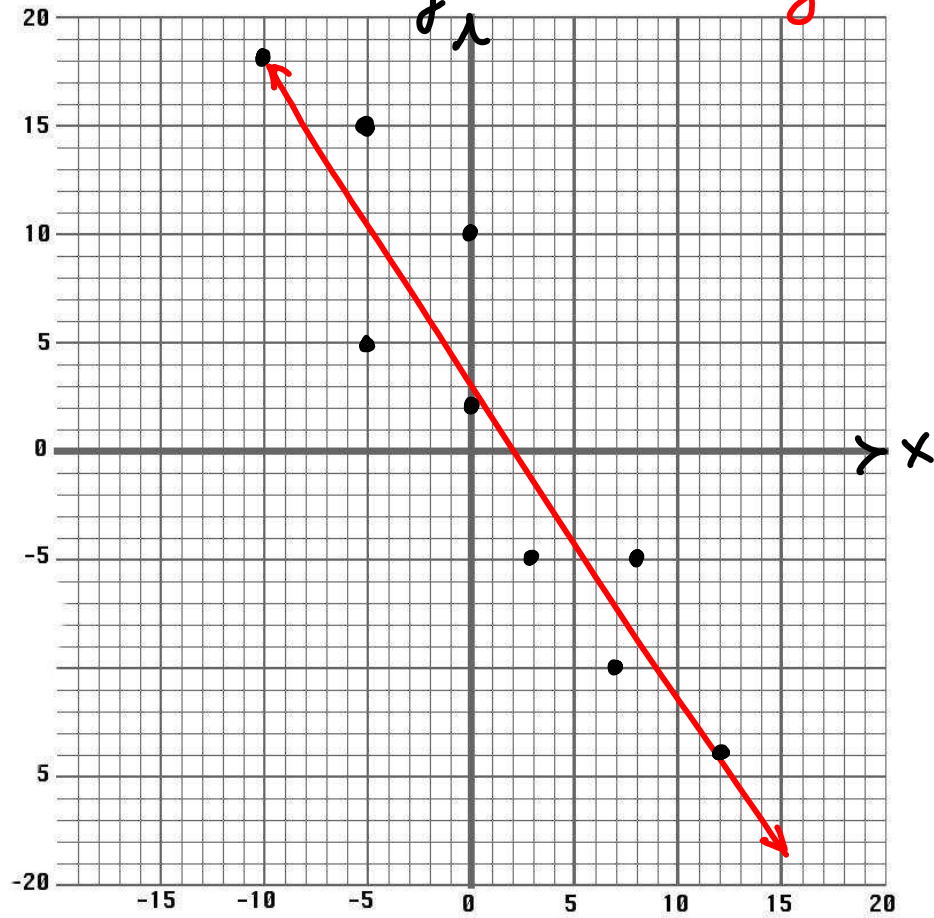
positive cor.





$$y = -\frac{7}{5}x + 3\frac{1}{2}$$

negative cor.





## Example Set: C



Hawk population in Hewitt, NJ has been decreasing over the last few decades. Use the data given to find a linear model for the Hawk population, then use the model to estimate what year the birds will be gone in Hewitt, NJ

$$\text{Hawk Pop} = -67\text{years} + 1900$$

Year	Hawk Population
1980	1900
1985	1500
1990	1200
1995	800
2000	600

2008