

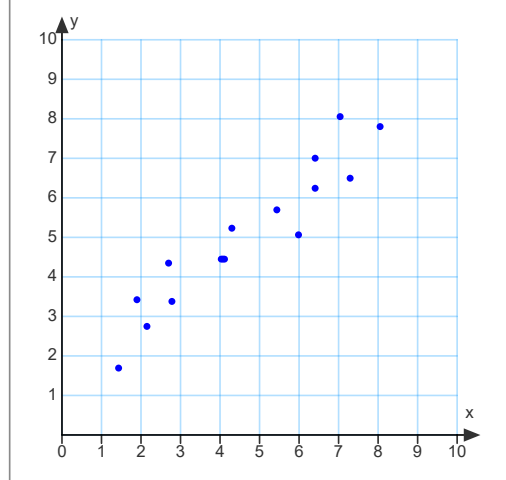
Scatterplots and Spreadsheets

Learning Goal:

By the end of today, I will be able to apply a curve of best fit to data that does not have a linear relationship.

What if the Line of Best Fit

Doesn't "fit" very well???



1. Draw a line of best fit.

2. Estimate the y values when:

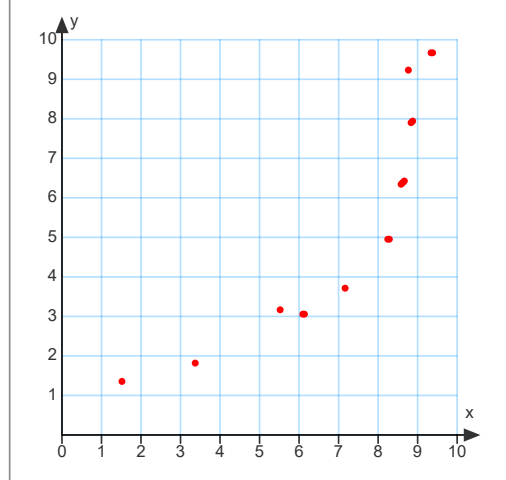
a) $x = 2.5$

b) $x = 5$

c) $x = 9$

NOTES:

- obviously a relationship exists between x and y
- we can find the equation of this line ($y = mx + b$)
- we will use our line of best fit to estimate values



1. Draw a line of best fit.

2. Estimate the y values when:

a) $x = 2.5$

b) $x = 5$

c) $x = 9$

3. Does the line of best fit accurately describe this relationship? Explain.

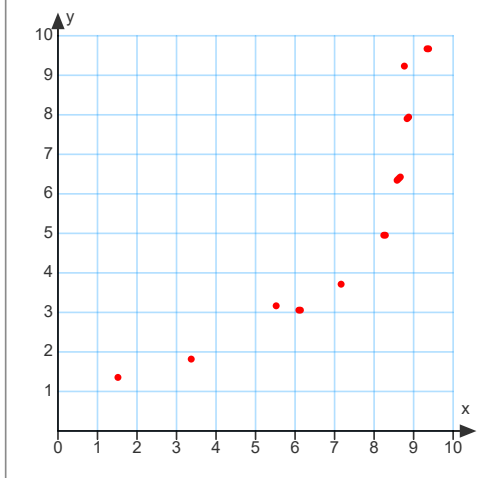
NOTES:

- does a relationship exist between x and y ?

- can we use our line of best fit to estimate values?

Note, that sometimes when you draw a line of best fit, it will NOT accurately represent the relationship between x and y .

In this case, you will draw a CURVE of Best Fit.



1. Draw a CURVE of best fit.

2. Estimate the y values when:

a) $x = 2.5$

b) $x = 5$

c) $x = 9$

Summary:

- sometimes a curve represents the trend or pattern in a scatter plot better than a line
- in this case you would use a Curve of Best Fit

Consolidation Questions

pg. 349 #1