

LESSON 2: LINE OF BEST FIT

Use a line of best fit to:

- show the trend (pattern) and direction of
- make predictions

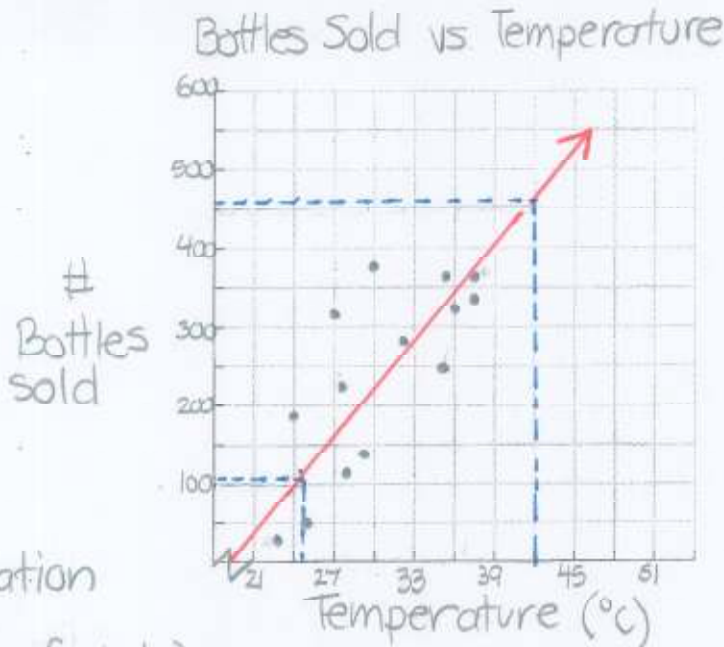
To create a line of best fit:

- try to hit as many points as possible.
- try to get same amount of points above the line as below
- ignore outlier.

Example: The table shows the sales of bottled water at a refreshment booth at the Canadian National Exhibition in Toronto for different days during a heat wave one summer.

Temperature (°C)	23	25	28	29	24	28	27	30	32	35	35	37	36	37
Bottles Sold	32	50	112	147	193	223	312	376	286	250	357	364	321	335

a) Draw a scatter plot and line of best fit for the following data.



interpolation
 (prediction within the range of data)

b) Predict how many bottles of water will be sold on a day when the temperature reaches 25°C.

about 100 bottles

c) Predict how many bottles of water will be sold on a day when the temperature reaches 42°C.

extrapolation about 475 bottles were sold

