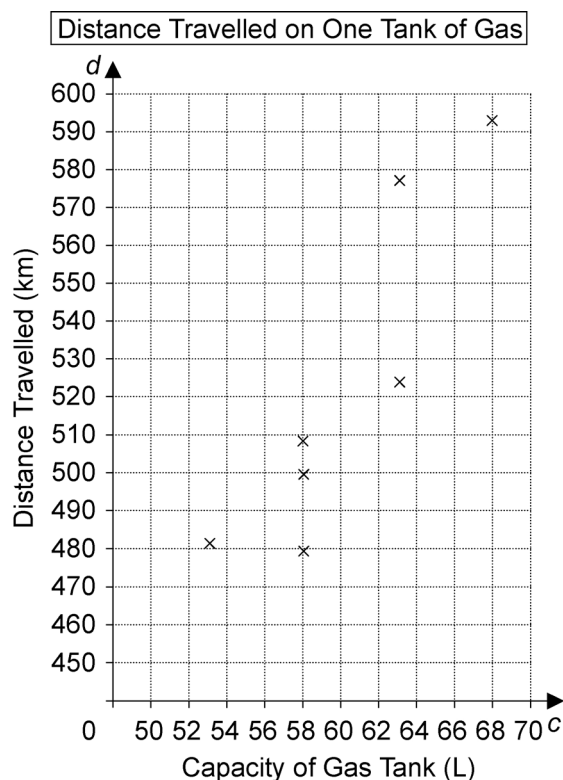


## Practice: Use Scatter Plots to Analyse Data

- Classify the variables in each pair as independent or dependent.
  - distance travelled and speed
  - quality of study and exam mark
  - time of year and cost of vacation
  - amount of wool needed and number of sweaters

- This scatter plot shows the capacity of gas tanks and the distance travelled on one tank of gas.



- Which is the independent variable?  
Which is the dependent variable?
- Describe the relationship between the capacity of the gas tank and the distance travelled.

- The table shows the heights and arm spans for a group of students:

Height (cm)	Arm Span (cm)
162	160
174	175
162	163
171	168
157	171
175	173
154	153
179	177

- Draw a scatter plot of the data.
- Describe the relationship between a person's height and arm span.
- Identify any outliers and explain how they are different from the rest of the data.

- The table shows the values of some used cars.

Value (\$1000s)	Age (years)
36	3
22	6
25	4
29	4
31	3
37	2
21	7

- Identify the independent variable and the dependent variable.
- Draw a scatter plot of the data in the table.
- Describe the relationship between the age of a car and its value.
- Jane bought a 7-year-old car for \$28 000. Did she pay too much? Explain.