

U4D6_T Review

Thursday, March 22, 2018 2:02 PM



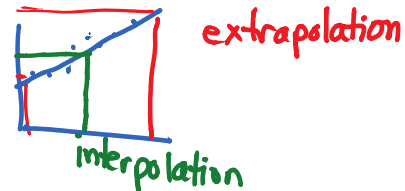
U4D6_T
Review

U4D6

Unit 4: Review

- Primary vs. Secondary Data
- Types of Sampling (simple random, systematic random, stratified random)
- Scatter Plots - Dependent and Independent Variables
- Lines and Curves of Best Fit
- Interpolation and Extrapolation
- Distance/Time Graphs

slowing down speeding up stopped



Example 1: Identify the type of sampling in the following examples:

- a. You randomly choose students proportionately from each grade based on the number of students in the grade.

stratified

- b. Students are chosen by randomly selecting a student number from a list and then choosing every tenth person after that.

systematic

- c. You select students in your phys ed class to interview about the need for newer gym equipment.

non-random

- d. All students names are put in a hat and 100 names are selected randomly to interview.

simple random

Example 2: Graphing and Analyzing Sample Question

Two ships are travelling on parallel courses that are 10 km apart. This table shows the distance between the two ships over a 12-hour period.

- a) Identify the dependent and independent variables.

| Time (h) | Separation (km) |
|----------|-----------------|
| 0 | 575 |
| 1 | 530 |
| 2 | 500 |
| 3 | 445 |
| 4 | 410 |
| 5 | 380 |
| 6 | 330 |
| 7 | 300 |
| 8 | 255 |
| 9 | 210 |

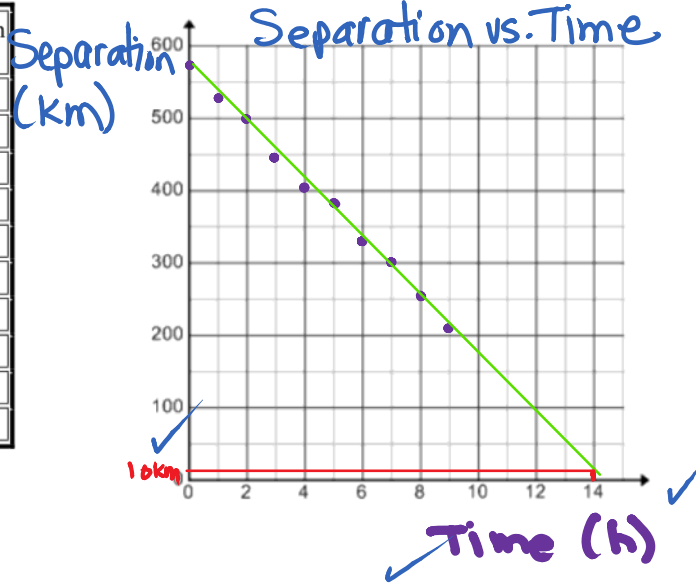
Dependent

Independent

Time

b) Make a scatter plot of the data.

| Time (h) | Separation (km) |
|----------|-----------------|
| 0 | 575 |
| 1 | 530 |
| 2 | 500 |
| 3 | 445 |
| 4 | 410 |
| 5 | 380 |
| 6 | 330 |
| 7 | 300 |
| 8 | 255 |
| 9 | 210 |



c) Describe the relationship between the variables and draw a line of best fit.

As the time increases, the separation decreases.

d) Identify any outliers.

e) Predict when the ships will be closest. Did you use interpolation or extrapolation to make your prediction?

After 14 hours



U4D6 HW: Pages 95
 - 97 # 1 - 13 Extra
 Practice: Pages 98 -
 99 # 1 - 10