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Correlation Task

Name:

Questions for Correlation.html

1. Introduction

a) "How many distinct data points n does our sample contain?"

b) "How many variables p does our dataset contain?"

c) "What is the value of x_{21}?"

2. Visual inspections with scatterplots

Answer the following questions to verify that you understand the relationship between x and y

"The relationship between variable x and y seems to be...",

a) "positive (uphill)" ☐

b) "negative (downhill)" ☐

c) "zero (horizontal)" ☐

"If variable x increases, variable y... ",

a) "increases (uphill)" ☐

b) "decreases (downhill)" ☐

c) "stays the same (horizontal)" ☐

7. Visualization of different relationships

Hint: multiple answers are correct

"Relationship one is..."

a)"positive"; ☐

b) "negative"; ☐

c) "zero"; ☐

d) "linear"; ☐

e) "non-linear"; ☐

f) "monotonic"; ☐

g) "non-monotonic" ☐

"Relationship two is ..."

a)"positive"; ☐

b) "negative"; ☐

c) "zero"; ☐

d) "linear"; ☐

e) "non-linear"; ☐

f) "monotonic"; ☐

g) "non-monotonic" ☐

"Relationship three is ..."

a)"positive"; ☐

b) "negative"; ☐

c) "zero"; ☐

d) "linear"; ☐

e) "non-linear"; ☐

f) "monotonic"; ☐

g) "non-monotonic" ☐

"Relationship four is ..."

a) "linear"; ☐

b) "non-linear"; ☐

c) "monotonic"; ☐

d) "non-monotonic" ☐