Lesson 4.2 Practice: The Correlation Coefficient

School Launch · Statistics · Unit 4: Scatterplots, Correlation and Regression · Worksheet A

Calculator / tables

Name _____ Date _____ Score _____ / 10

Show your work under each problem, one step per line, and check your answer. Word problems: name the unknown, write the equation, solve, and answer in a sentence with units.

1. Compute the correlation r (three decimals): $(10, 17)$, $(14, 25)$, $(18, 30)$, $(19, 29)$. EASY

2. Compute the correlation r (three decimals): $(8, 24)$, $(12, 37)$, $(14, 39)$, $(18, 43)$. EASY

3. Compute the correlation r (three decimals): $(1, 7)$, $(8, 3)$, $(11, 0)$, $(19, -8)$. EASY

4. Compute the correlation r (three decimals): $(8, -9)$, $(9, -5)$, $(11, -13)$, $(12, -11)$, $(18, -28)$. MEDIUM

5. Compute the correlation r (three decimals): $(2, 16)$, $(6, 19)$, $(8, 28)$, $(12, 34)$, $(15, 41)$. MEDIUM

6. Compute the correlation r (three decimals): $(7, -3)$, $(8, -8)$, $(11, -13)$, $(17, -22)$, $(18, -24)$. MEDIUM

7. Compute the correlation r (three decimals): $(8, 2)$, $(9, 3)$, $(11, -2)$, $(14, -7)$, $(18, -10)$. MEDIUM

8. Compute the correlation r (three decimals): $(2, 9)$, $(4, 7)$, $(5, 6)$, $(11, -2)$, $(15, -5)$, $(19, -8)$. HARD

9. Compute the correlation r (three decimals): $(1, 8)$, $(2, 5)$, $(3, 4)$, $(13, -15)$, $(15, -18)$, $(18, -25)$. HARD

10. Compute the correlation r (three decimals): $(6, 14)$, $(8, 17)$, $(11, 18)$, $(13, 21)$, $(18, 28)$, $(19, 31)$. HARD