

HW quiz 9/6

Use this data

x	4	6	7	8	11	12
y	19	19	17	16	12	8

① State the equation of the regression line (3 sig. figs)

$$y = \underline{\hspace{2cm}}x + \underline{\hspace{2cm}}$$

② State r (3 sig figs): $r = \underline{\hspace{2cm}}$

5G #1

(a) $r = 0.994$ This shows a ^{strong} ~~moderate~~ positive correlation.

(b) $y = \underline{1.47}x + 116$

(c) $1580 \text{ rupees} \rightarrow \frac{\Delta y}{\Delta x} = \frac{1.47 \text{ rupees}}{\text{km}}$

#2

(a) $r = 0.974$ strong positive correlation

(b) $y = 0.483x + 15.6$ $y = 0.483(x) + 15.6$

$\frac{0.483 \text{ cm}}{\text{kg}}$ is the amount the spring stretches as weight is added

This is the predicted length of the spring when there is no weight.

(c) 19.5 cm 0.0403
 0.0403
 0.040256

#5

(a) $y = 0.0127x + 0.688$

USD
GBP

(b) Each gram costs 0.0127 AUD

average predicted cost for buying no candy bars.

$y = 0.0127(70) + 0.688 = \underline{\underline{1.58 \text{ AUD}}}$

(b)