

## Block 9 – Linear regression

### Exercise 1

OpenIntro Stat exercise 8.1 Visualize the residuals.

### Exercise 2

OpenIntro Stat exercise 8.17 Units of regression.

### Exercise 3

OpenIntro Stat exercise 8.32 Beer and blood alcohol content.

### Exercise 4

OpenIntro Stat exercise 8.3 Identify relationships, Part I.

### Exercise 5

OpenIntro Stat exercise 8.18 Which is higher?

higher is

### Exercise 6

OpenIntro Stat exercise 8.27 Outliers, Part I.

### Exercise 7

OpenIntro Stat exercise 8.6 Husbands and wives, Part I.

(a) positive, weak and linear relationship with a few outliers, (b) weak and positive, (c) the age plot and (d) on

### Exercise 8

OpenIntro Stat exercise 8.33 Husbands and wives, Part II

### Exercise 9

OpenIntro Stat exercise 8.7 Match the correlation, Part I.

### Exercise 10

OpenIntro Stat exercise 8.42 Helmets and lunches.

(a)  $r = -0.849$ , (b)  $b = -0.537$  and  $b = 0.5534$ , (c)  $r = 0.14\%$  and  $r = 0.53\%$

### Exercise 11

OpenIntro Stat exercise 8.37 True / False.

### Exercise 12

OpenIntro Stat exercise 8.39 Husbands and wives, Part III

### Exercise 13

OpenIntro Stat exercise 8.38 Trees.

### Exercise 14

OpenIntro Stat exercise 8.26 Cats, Part I

(a) heart weight  $= -0.357 + 4.034 \cdot \text{body weight}$