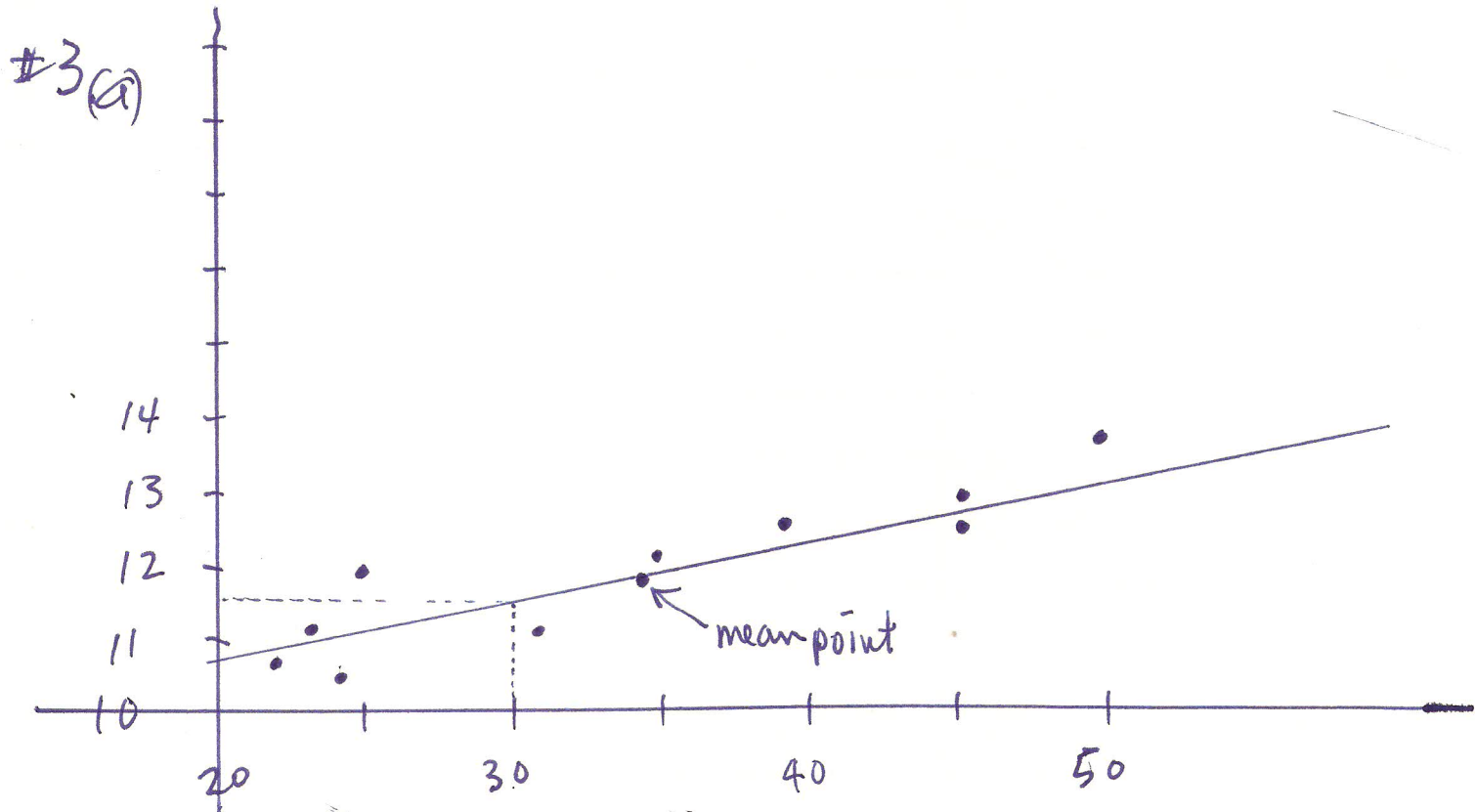


Non-Calculator Review



b) Age

22

23

24

25

32

35

39

45

45

+ 50

340

$$\bar{x} = \frac{340}{10} = 34$$

Time

10.9

11.1

10.8

12.0

11.2

12.1

12.6

13.0

12.7

13.6

120.0

$$\bar{y} = \frac{120}{10} = 12$$

Mean point: (34, 12)

(c) $\hat{y}(30) \approx 11.6$ (see dotted line on graph)

Calculator Review

#1 (a) do this on your calculator

(b) the number decreases

$$(c) \hat{y} = -1.29x + 9.00$$

(d) $r = -0.929$ This is a strong negative correlation

$$\#2 (a) \hat{w} = 55.5h - 22.4$$

$$(b) \hat{w}(1.6) = 55.5(1.6) - 22.4 = \underline{66.4 \text{ kg}}$$

$$\#3 (a) r = 0.785$$

$$(b) \hat{y} = 0.688x + 30.6$$

$$(c) \hat{y}(100) = 0.688(100) + 30.6 = \underline{99.4}$$

The r -value is moderately strong, so this estimate is a moderately good one.

#4 (a) do this on the calculator

(b) The scatterplot shows a strong positive correlation.

(c) high

$$(d) \hat{y} = 0.501x + 0.476$$

$$(e) \hat{y}(40) = 0.501(40) + 0.476 = \underline{20.5}$$