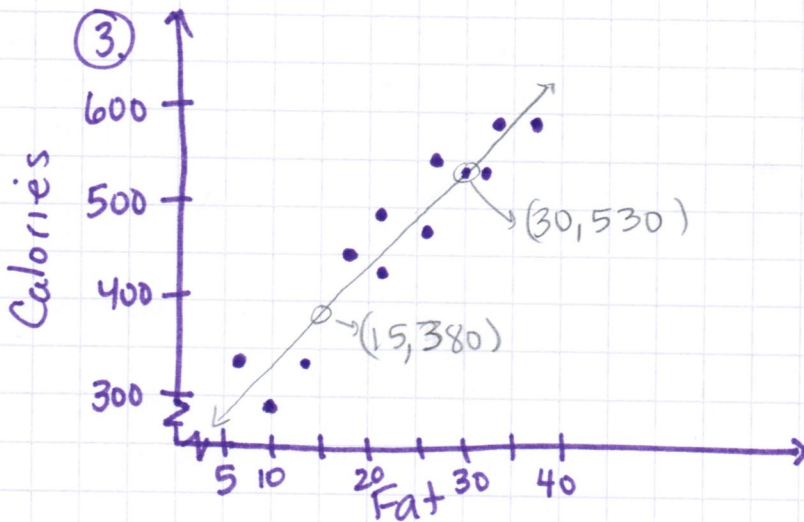


9-9 Scatterplot Ans Key:

HW: # 1-19, 29-30

① positive

② negative



④ your points may look diff. therefore your equations will be slightly diff → this is OK.

(30, 530) (15, 380)

$$m = \frac{530 - 380}{30 - 15} = \frac{150}{15} = 10$$

$$y = mx + b$$

$$530 = 30(10) + b$$

$$530 = 300 + b$$

$$230 = b$$

$$y = 10x + 230$$

⑤

$$350 = 10x + 230$$

$$\begin{array}{r} -230 \\ 120 = 10x \end{array}$$

$$12 = x$$

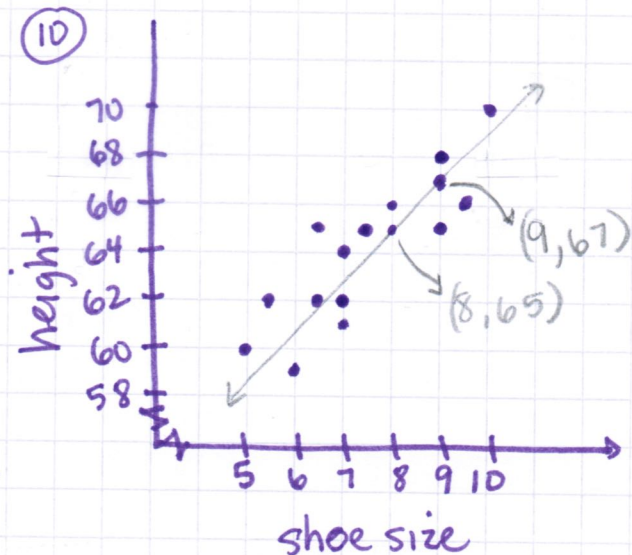
12 grams of fat

⑥ positive

⑦ negative

⑧ no correlation
no relationship

⑨ positive



⑪

$$m = \frac{67 - 65}{9 - 8} = \frac{2}{1} = 2$$

$$65 = 2(8) + b$$

$$65 = 16 + b$$

$$49 = b$$

→ estimate

$$y = 2x + 49$$

⑫

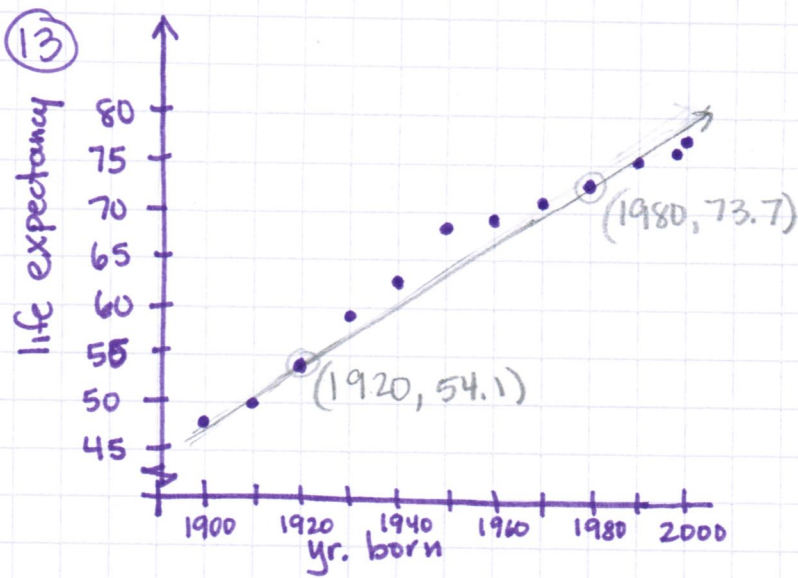
$$y = 2(5) + 49$$

$$y = 10 + 49$$

$$y = 59$$

59 inches tall

(one inch shorter than Ms. Mack !!)



14

$$\frac{73.7 - 54.1}{1980 - 1920} = \frac{19.6}{60} = .327 = m$$

$$73.7 = 1980 \cdot .327 + b$$

$$73.7 = 647.46 + b$$

$$-573.76 = b$$

$$y = .327x - 573.76$$

↑ estimate

15

$$y = .327(2020) - 573.76$$

$$y = 666.54 - 573.76$$

$$y = 86.78$$

Life expectancy about 86.78 yrs

16 positive ↑ side ↑ perimeter

17 no relationship

18 positive ↑ time ↑ water usage

19 negative ↑ temp ↓ heat or ↑ heat bill ↓ temp outside

29 A

30 J