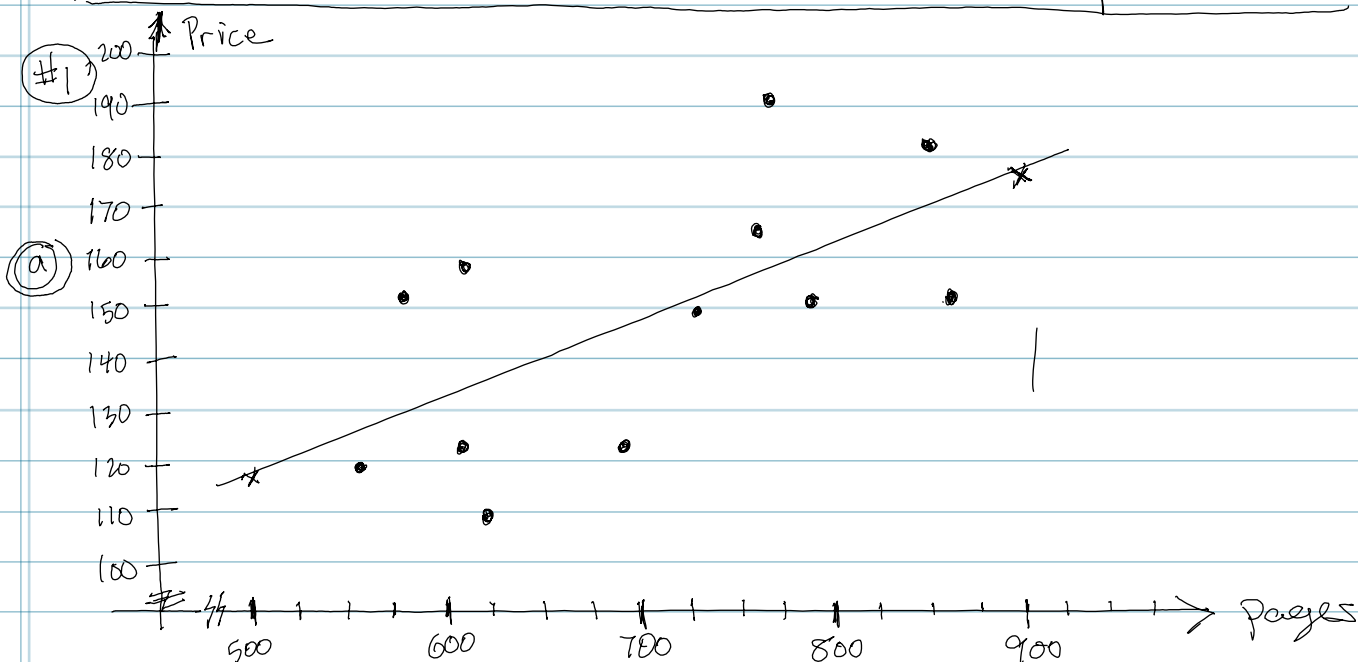


✱ Math 110 ~ Test 2 Review ~ Chap's 3-6 ✱



(b) Form: linear, direction: positive (uphill)
 strength: moderate.

(c) $r = 0.6196 \approx 0.620$ (moderately strong & positive)

(d) $\hat{y} = \text{slope} \cdot x + \text{yint} \rightarrow \hat{y} = 0.150x + 42.315$

(e) $\hat{y} = 0.150 \cdot 650 + 42.315 \approx 139.815 \rightarrow \139.82

#2

		E Physically Fit	F Not Physically Fit	Totals
TV Hours	A=0	35 ←	147	182 ←
	B=1 to 2	101	629 ←	730
	C=3 to 4	28	222	250
	D=≥5	4	34	38
	Totals	→ 168	1032	1200 ←

Grand Total

(a) $P(A) = 182/1200 \approx .152$

(b) $P(E) = 168/1200 \approx 0.140$

(c) $P(A \cap E) = 35/1200 \approx 0.0292$

(d) $P(B \cap F) = 629/1200 \approx 0.524$

(e) $P(E \cap F) = 0$

(f) $P(A \text{ or } E) = \frac{182}{1200} + \frac{168}{1200} - \frac{35}{1200}$
 $= \frac{315}{1200} \approx 0.263$

(g) $P(F|A) = 147/182 \approx 0.808$

(h) $P(F|D) = 34/38 \approx 0.895$

(i) $P(\bar{B}) = 1 - P(B)$
 $= 1 - \frac{730}{1200} \approx 0.392$