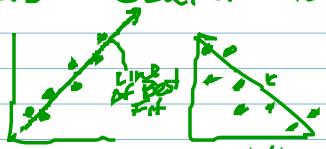
Unit 2.5 Scatter Plots & Lines of Best Fit

Pg 92



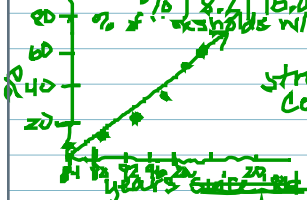
Strong Positive Correlation

Weak Negative Correlation

No Correlation

Ex #1.

year	1981	1985	1993	1997	2001	2003
%	8.2	15.0	22.8	36.6	56.3	61.8



$y = mx + b$

$(-003, 61.8)\ (1989, 16)$

$\frac{16 - 61.8}{1989\ \ 2003} = \frac{-45.8}{-14} = 3.27$

$y = 3.27x + b$

$16 = 3.27(5) + b$

$16 = 16.35 + b$

$-16.35 \quad -16.35$

$-.35 = b$

$y = 3.27x - .35$

Pg 95

m	v	200	500	1000	2000	2500
c	22	20	13	7	6	?

(1) 2nd num 4: Clear enter

(2) Stat: edit enter (List pt)

(3) 2nd stat plot enter

(4) y= (Clear all equations)

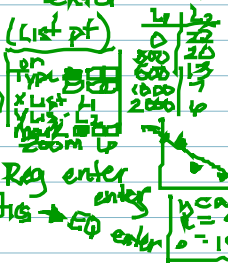
(5) Graph Zoom 9 or Zoom 0

(6) Stat → Calc 4: LinReg enter

(7) v= Vars 5: Statistics → EQ enter

(8) Graph Zoom 9

(9) 2nd Tblset, 2nd Table



$y = -.008x + 19.85$

$y = -.008(2500) + 19.85$

$y = -.15°C$

Unit 2.5 Scatter Plots & Lines of Best Fit

Pg 92

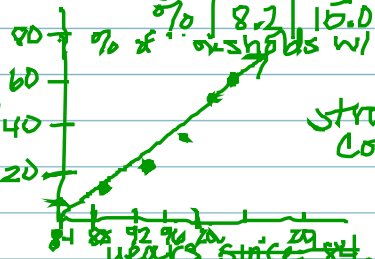
Strong Positive Correlation

Weak Negative Correlation

No Correlation

Ex #1.

year	1984	1989	1993	1997	2001	2003
%	8.2	16.0	22.8	36.6	66.3	61.8



strong pos. correlation

$y = mx + b$

$(-003, 61.8)\ (1989, 16)$

$\frac{16 - 61.8}{1989\ \ 2003} = \frac{-45.8}{-14} = 3.27$

$y = 3.27x + b$

$16 = 3.27(5) + b$

$16 = 16.35 + b$

$-16.35 \quad -16.35$

$-.35 = b$

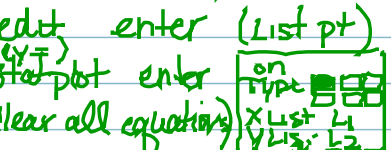
$y = 3.27x - .35$

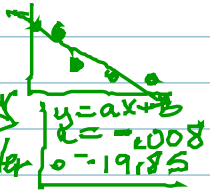
Pg 95 #1

m	v	200	500	1000	2000	2500
°C	22	20	13	7	6	?

1) 2nd mem 4: clear enter
2) Stat edit enter (List pt)
3) 2nd Stat plot enter
4) y= (clear all equations)
5) Graph zoom 9 or
6) Stat → Calc 4: LinReg enter
7) v= Vars 5: statistics → EQ enter
8) Graph Zoom 9
9) 2nd Tblset, 2nd Table

L1	L2
0	22
200	20
500	13
1000	7
2000	6





enter

y = ax + b
a = -.008
b = 19.85

$y = -.008x + 19.85$

$y = -.008(2500) + 19.85$

$y = -.15°C$