

**GRADE 11 ESSENTIAL
UNIT F – RELATIONS & PATTERNS – BEST FIT LINES**

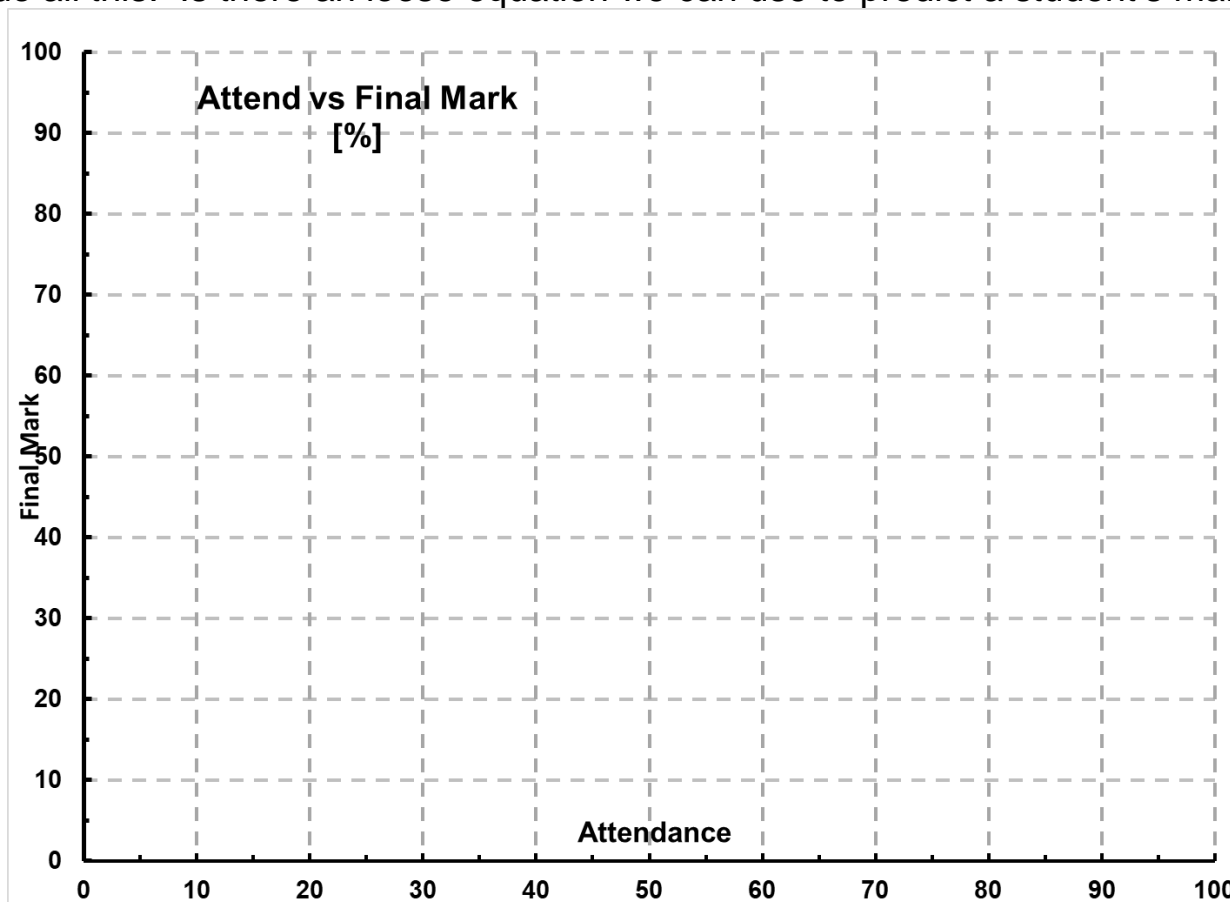
Name: _____

Date: _____

Mr. F tabulated the attendance and marks of 16 students in his class.

- plot the Scatter Plot.
- draw a line-of-best-fit (half the points above, half the points below)
- is there a strong correlation between a student's attendance and their final mark?
- use technology to do all this. Is there an loose equation we can use to predict a student's mark?

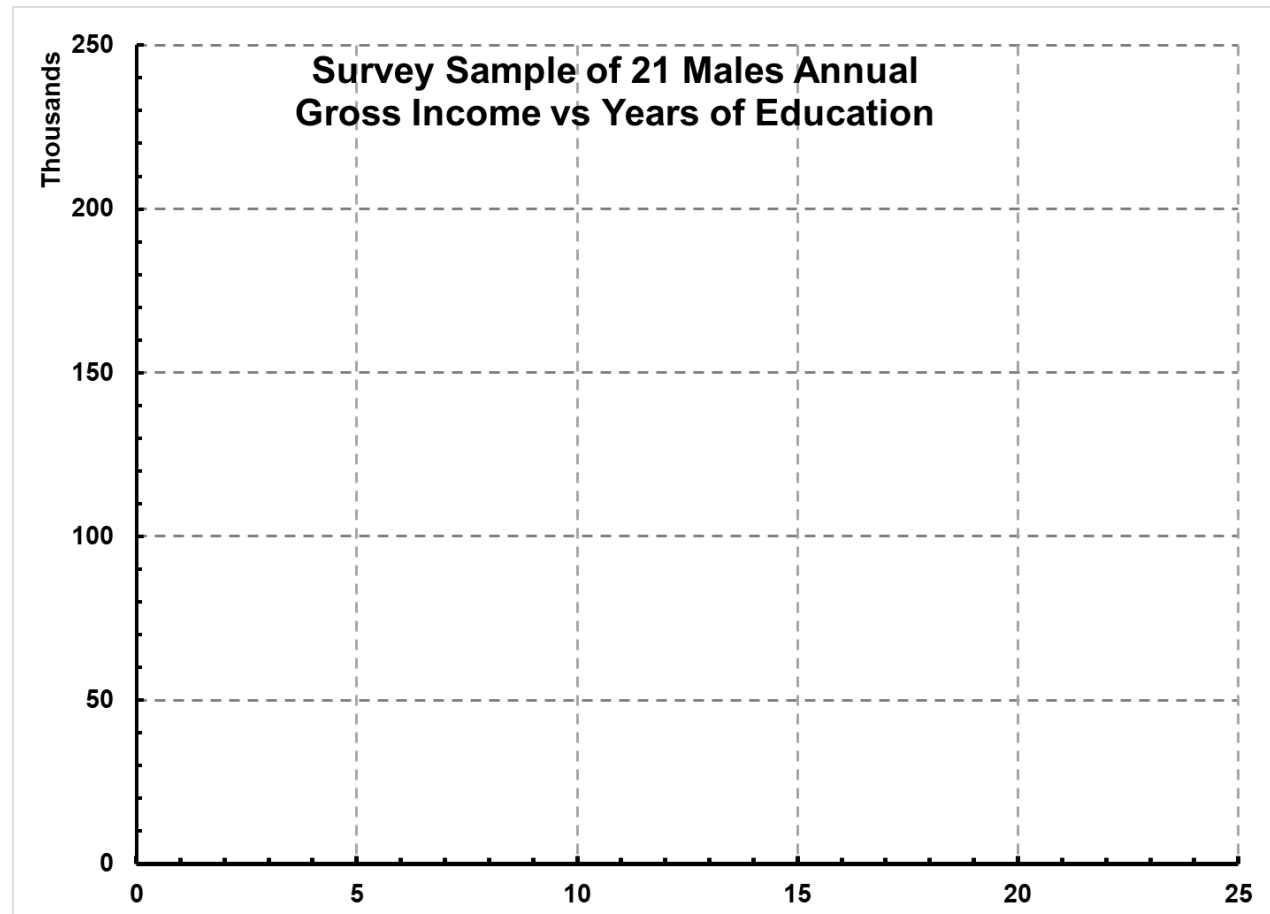
Attendance [%]	Final Mark [%]
97	87
97	98
50	40
50	72
50	34
60	60
62	32
22	13
80	76
76	80
28	42
91	94
88	35
80	92
47	33
26	34



We randomly survey 21 males and asked them their gross income and their years of education. The results were tabulated.

Years of Education	Annual Income
8	17,000
9	18,000
9	63,000
10	21,000
11	56,000
11	25,000
11	23,500
12	56,000
12	37,500
12	82,000
13	56,000
15	82,000
15	92,500
16	88,750
16	132,000
16	204,000
18	94,000
18	36,000
22	42,000
23	62,000
23	196,000

a. Graph the scatterplot of the data to see if there is a relationship.



b. Fit a best fit line. Half the points above, half the points below.

c. Does there appear to be a correlation between a man's income and his years of education?

[d. Do you know how to use technology to do all this on your phone?]