

Name _____

Period _____

Line of Best Fit

Use your calculator to find the equation of the line of best fit. Round to the hundredths place.

1. Weight vs. Height

Weight (kg)	Height (cm)
48	153
64	175
83	185
60	151
63	166
92	190
88	185

y = _____

2. Mass vs. Time

Mass (g)	Time (sec)
9	26
13	32
22	41
30	54
31	57
31	55
35	62

y = _____

3. Test Score vs. HW completed

Test	HW (#assignments)
43	5
65	7
80	32
90	36
91	50
63	15
60	35
98	42

y = _____

4. Mass vs. Stretch of Spring

Mass (g)	Stretch (cm)
10	6.9
20	10.2
30	13.8
40	21.3
50	24.3

y = _____

5. Time vs. Velocity

Time (sec)	Velocity (mph)
3	5.3
4	7.6
5	14.9
6	24.6
7	32.2
8	48.8
9	36.1

y = _____

6. Tennis Ranking vs. Earnings

Rank	Earnings (Millions)
1	2.5
2	2.2
3	2.1
4	1.7
5	1.4
6	1.3
7	1.2
8	1

y = _____

7. State Test Score vs. SAT Scores

State Test	SAT
90	1250
87	1180
76	1100
91	1420
65	1020
25	650
80	1150
78	990

y = _____

8. Hours studying vs. Test grade

Study (hours)	Grade
3.0	82
1.5	73
1.0	47
3.7	85
0.5	56
1.0	60
3.0	86
4.1	92

y = _____

9. Experience vs. Yearly Income

Experience (years)	Income (thousands)
2	20
4	29
5	38
10	36
10	52
14	50
20	57
25	62

y = _____

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Line of Best Fit

Latitude and Average Daily Temperature in July for 10 world cities

Name	Latitude (°N)	July Temp.(°C)
Oslo	59	7
Berlin	52	18.5
London	51	17
Vancouver	49	17
Tunis	37	26
Tomsk	56	18
Kiev	50	20
Coppermine	67	10
Rome	41	24
Salah	27	37

1. What is the linear equation that represents the July temperature of a city based on its north latitude? (Round decimals to the thousandths)

2. What would be the expected July temperature at each of the given latitudes below? (Round to tenths)

25°N _____ 54°N _____ 70°N _____

Distance vs. Time Squared for Freefall

Time (sec ²)	Distance (m)
0.04	0.21
0.09	0.53
0.16	0.92
0.24	1.25
0.36	1.94
0.48	2.73
0.64	3.15
0.82	4.23
1.00	5.10

1. What is the linear equation that represents distance vs. time squared for freefall? (Round decimals to the thousandths)

2. What would be the expected distance at each of the given sec² below? (Round to hundredths)

0.50 sec² _____ 2.00 sec² _____

Global Temperature by Year 1900-2000

Year	Temperature (°F)
1900	57.20
1910	56.82
1920	56.97
1930	57.13
1940	57.47
1950	56.93
1960	57.16
1970	57.27
1980	57.67
1990	58.08
2000	57.92

1. What is the linear equation that represents global temperature by year? (Round to the thousandths)

2. What would be the expected temperature for the following years? (Round to hundredths)

2025 _____ 2050 _____ 2100 _____

Fat and Total Calories of Fast Food

Sandwich	Total Fat (g)	Total Calories
Hamburger	9	260
Cheeseburger	13	320
Quarter Pounder	21	420
Big Mac	31	560
Arch Special	31	550
Crispy Chicken	25	500
Fish Fillet	28	560
Grilled Chicken	20	440

1. What is the linear equation that represents total calories vs. fat? (Round decimals to the thousandths)

2. Predict total calories for a sandwich with the following grams of fat: (Round to nearest integer)

4g fat _____ 50g fat _____