

Hours Spent Studying	Math SAT Score
4	390
9	580
10	650
14	730
4	410
7	530
12	600
22	790

1. Make a scatter plot and sketch what you see on the screen.

2. Find the Linear Regression equation.
Round to the nearest hundredth as needed.

3. Use this equation to find the # of hours studied if the SAT score was 200.

4. If the score was 450 find the number of hours studied.

Chirps/Second	Temperature (° F)
20.0	88.6
16.0	71.6
19.8	93.3
18.4	84.3
17.1	80.6
15.5	75.2
14.7	69.7
15.7	71.6
15.4	69.4
16.3	83.3

5. Make a scatter plot and sketch what you see on the screen.

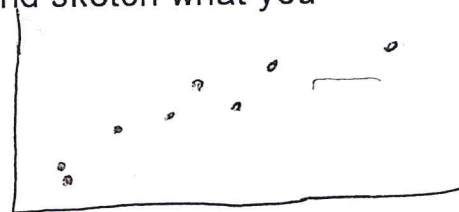
6. Find the Linear Regression equation.
Round to the nearest hundredth as needed.

7. Use this equation to find the Temperature if there are 13 chirps/sec.

8. Find the # of chirps/sec if the Temperature is 100°F.

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1. Make a scatter plot and sketch what you see on the screen.



2. Find the Linear Regression equation.

Round to the nearest hundredth as needed.

$x = \text{hrs}$
 $y = \text{SAT score}$

$$y = 22.24x + 357.04$$

3. Use this equation to find the # of hours studied if the SAT score was 200.

$$x = -7.06 \text{ hrs}$$

$$200 = 22.24x + 357.04$$

y

4. If the score was 450 find the number of hours studied.

y

$$450 = 22.24x + 357.04$$

$$x = 4.18 \text{ hrs}$$

Chirps/Second	Temperature ($^{\circ}\text{F}$)
20.0	88.6
16.0	71.6
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15.7	71.6
15.4	69.4
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5. Make a scatter plot and sketch what you see on the screen.



6. Find the Linear Regression equation.

Round to the nearest hundredth as needed.

$x = \text{chirps/sec}$
 $y = \text{Temp}$

$$y = 4.15x + 8.70$$

7. Use this equation to find the Temperature if there are 13 chirps/sec.

$$y = 4.15(13) + 8.70 \approx 62.65^{\circ}\text{F}$$

8. Find the # of chirps/sec if the Temperature is 100°F .

$$100 = 4.15x + 8.70$$

$$x \approx 22 \text{ chirps/sec}$$