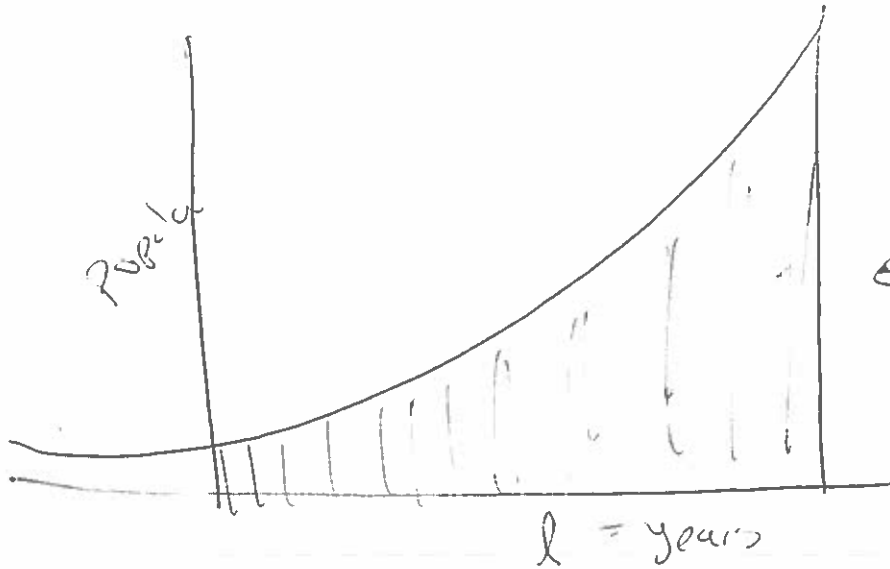
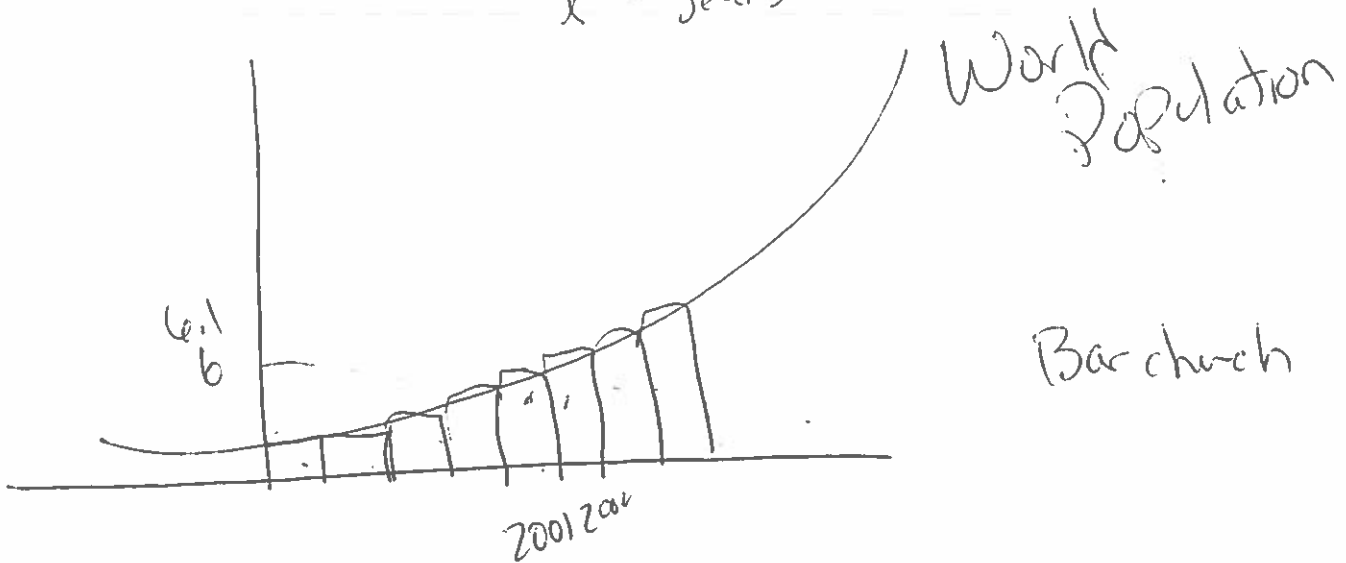


Area under a curve

1st h. day 17



← Area under a curve.

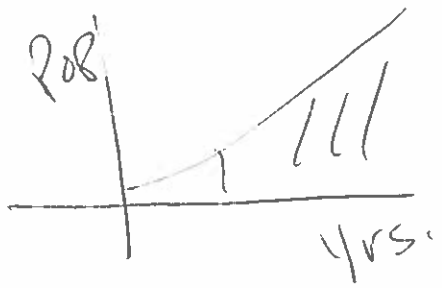


Area under curve \approx Sum of

If this were deaths

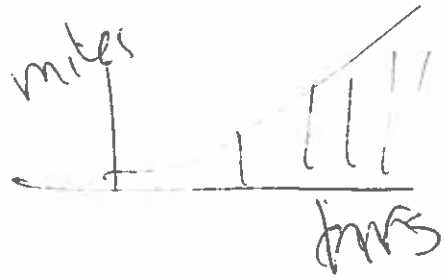
→ Then you get Grand Total of Deaths

Bar chart



Area = Pop yrs

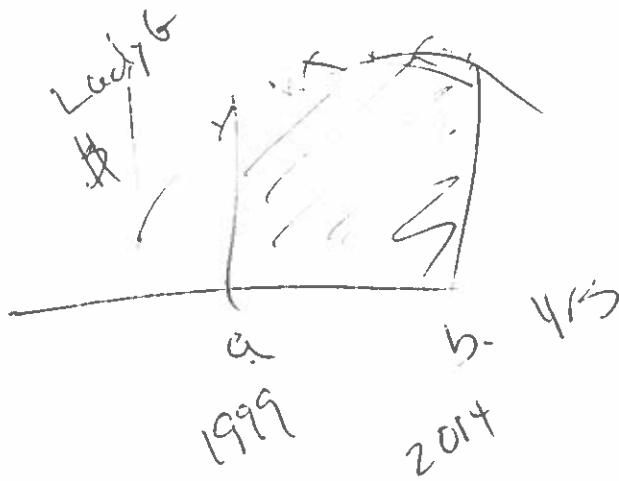
units



Area = miles-hrs

Average population = $\frac{\text{Area}}{\text{length}} = \frac{\text{Pop. yr.}}{\text{yrs}}$

You:



$y_1 = \text{reg eq.}$

Calc 7: $\int f(x) dx$

Lower: 1999

Upper: 2014

$\int f(x) dx = \frac{500}{\$ \cdot \text{yrs}}$

Lcdy G made 500 million dollars

GROUP NAME:

Student Names (First and Last) Ahmed & June

Date: 04/01/2014

Speaker/Presenter: June

Independent Variable (x-axis): Income

Writer/Prep: June & Ahmed

Dependant Variable (y-axis): Crime rate

Leader/Collaborator: Tyler

Conclusion (in words):

The Av. Crime rate for all incomes between 20k and 100k is .2765.

Supporting Work:

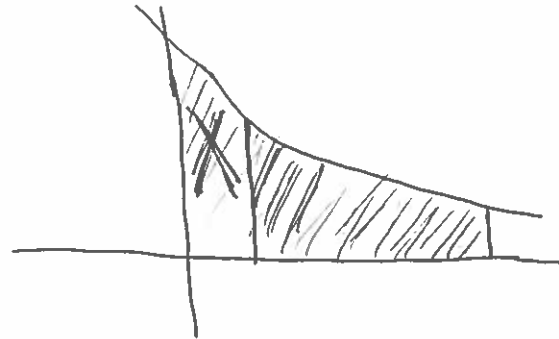
Using the ln regression

$$b = a + b \ln x$$

$$a = 68.2547761$$

$$b = -10.132...$$

$$f = -.448...$$



$$\int f(x) dx = 22.119867$$

$$\text{Aver\%} = \frac{22.119867}{80} = .2764983375$$

GROUP NAME: W110 BABY SAVER

Date: 4/1

Student Names (First and Last)

Speaker/Presenter: Jenna

Writer/Prep: Kathleen

Leader/Collaborator: Cathryn

Independent Variable (x-axis): years

Dependant Variable (y-axis): steroid in food in babies (ppm)

Conclusion (in words):

The average amt. of steroid in food in babies is 153 ppm.

Supporting Work:

| Year | Steroid in food in Babies |
|------|---------------------------|
| .01 | 122 |
| 03 | 100 |
| 06 | 143 |
| 09 | 200 |
| 12 | 170 |

Lower .01

Upper: 12

$$\int f(x) dx = 1833.4839 \text{ ppm}\cdot\text{yrs}$$

$$\begin{aligned} \text{Average steroid in 'food' in Babies} &= \frac{1833.4839}{11.99} \\ &= 152.9177565 \text{ ppm} \end{aligned}$$

Ln Reg

$$y = a + b \ln x$$

$$a = 143.0862802$$

$$b = 6.594676182$$

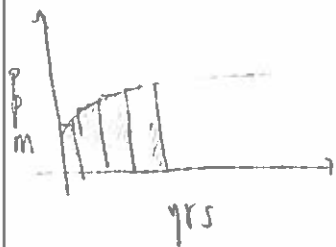
[141] Best fit

• Cubic Reg

$$r^2 = 0.9942967138$$

$$\int f(x) dx = 1764.2816$$

$$\text{Average} = 147.1460884$$



GROUP NAME: Fluffy Ponies

Date: Apr 11

Student Names (First and Last)

Speaker/Presenter: Milton/Ahmed

Independent Variable (x-axis): income

Writer/Prep: Courtney

Dependant Variable (y-axis): crime rate

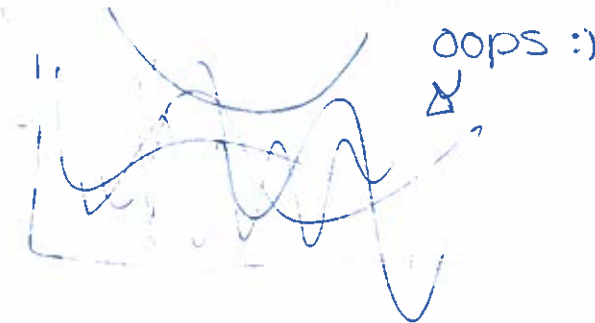
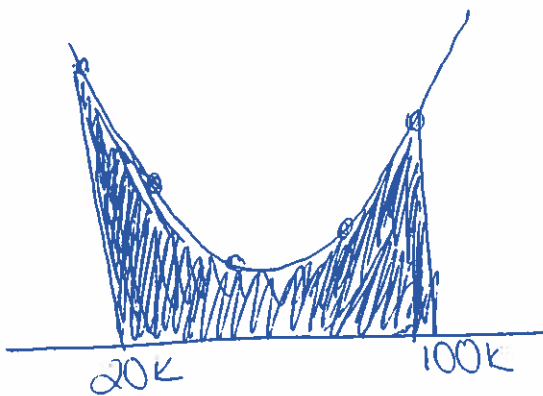
Leader/Collaborator: Tyler/Jane

Conclusion (in words):

The average crime rate for income between 20K and 100K is ~~23~~ 23.25%.

Supporting Work:

$f(x) dx = 18598095$

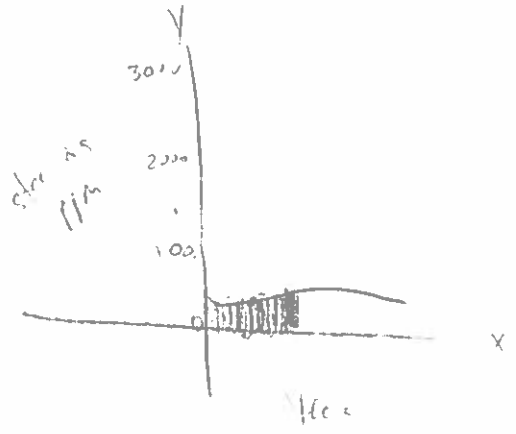


$$\frac{18598095}{80} = .2324761875$$

| | |
|--|--|
| <p>GROUP NAME: <u>W.H.O.</u></p> <p>Date: <u>4/1/14</u></p> | <p>Student Names (First and Last)</p> <p>Speaker/Presenter: <u>Charles</u></p> |
| <p>Independent Variable (x-axis): <u>years</u></p> <p>Dependent Variable (y-axis): <u>steroid level in ppm</u></p> | <p>Writer/Prep: <u>Cathryn</u></p> <p>Leader/Collaborator: <u>Michael</u></p> |

Conclusion (in words):
 From 2000 to 2006, the average exposure of steroids in ppm in baseball players was 111.125 ppm. This is the average regression

Supporting Work:



The average was \bar{x} of the steroid years added together $\sum x$ then we divided by n (99) $(x_1 - x_2)$.

GROUP NAME:

Student Names (First and Last)

Date: 4/1/14

Speaker/Presenter: Kero

Independent Variable (x-axis): year

Writer/Prep: Jenn

Dependant Variable (y-axis): \$ tuition

Leader/Collaborator: Jason

Conclusion (in words):

FROM 2010 TO 2014 the total sum of tuition will be 13418.09.

Supporting Work:

quartic

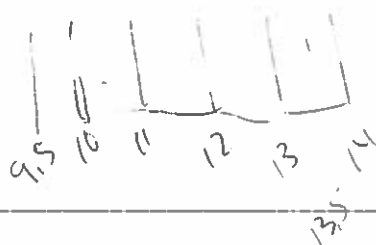
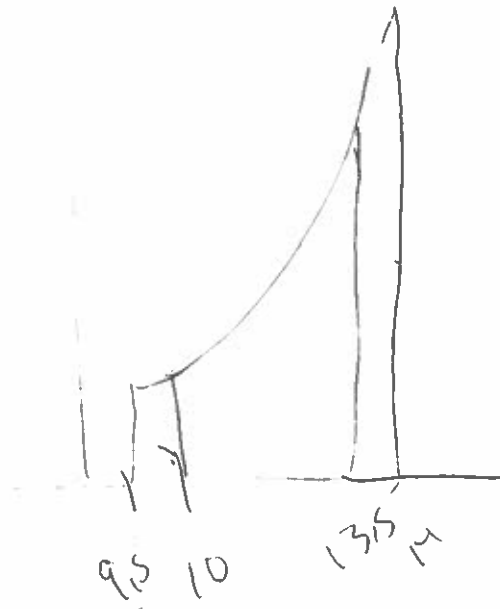
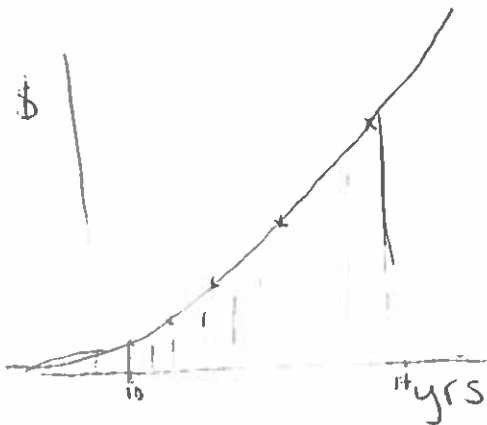
$$y_1 = -2.041...x^{14} + 97.916...x^{13} + -1733.958...x^{12} + 13477.083...x + -35573.999...$$

calc 7 $\int f(x) dx$

lower: 10

upper: 14

$$\int f(x) dx = \frac{13418.09}{\$yr}$$



GROUP NAME: P. Minions

Date: 4/1/14

Student Names (First and Last)

Speaker/Presenter: Dallen

Writer/Prep: Daniella

Leader/Collaborator: Jason

Independent Variable (x-axis): Years

Dependant Variable (y-axis): \$

Conclusion (in words):

Someones tuition for 5 years of mercer would be \$13,460.8 \approx \$3,365.20 Per Year

Supporting Work: Lin

$$y_1 = 49.8x + 27676$$

Calc 7: $\int f(x) dx$

Lower: 10

Upper: 14

$$\int f(x) dx = \frac{13,460.8}{\$yrs}$$



I love \heartsuit Math