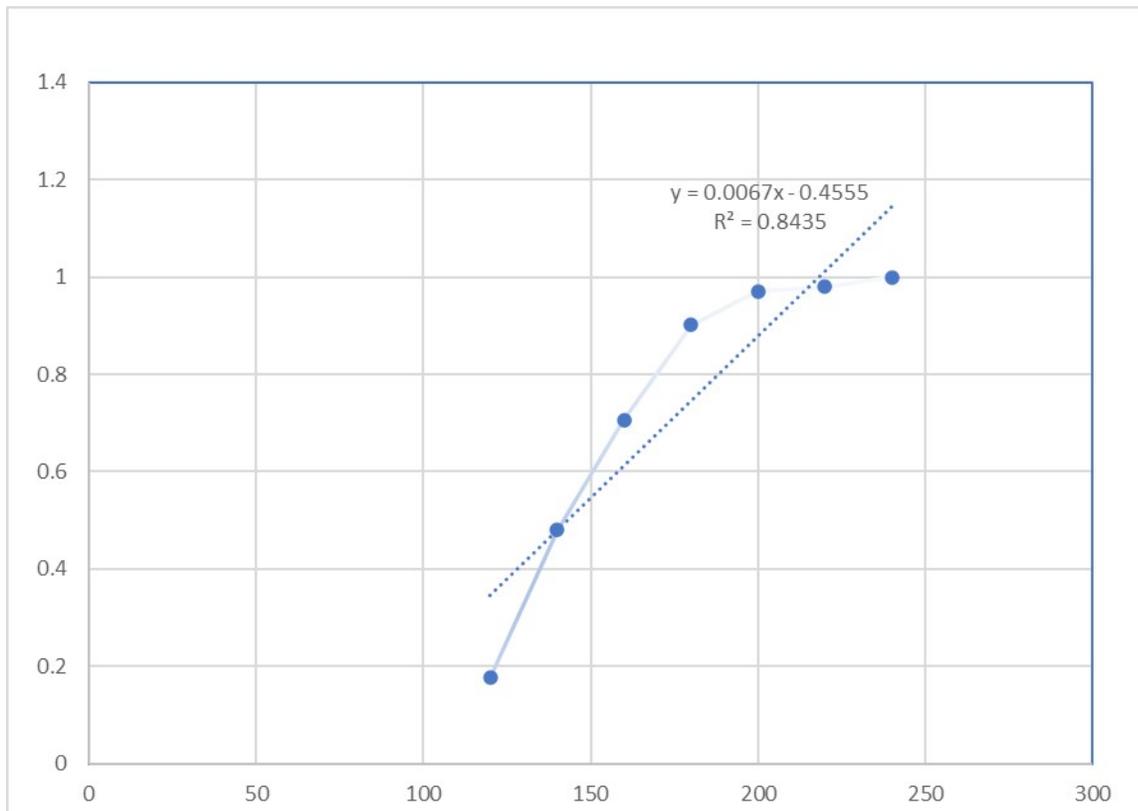


Skye Bonaby

Environmental Engineering

Module Assessment 3

3.1



a. $y = 0.0067(10) - 0.455$

$y = 0.388$

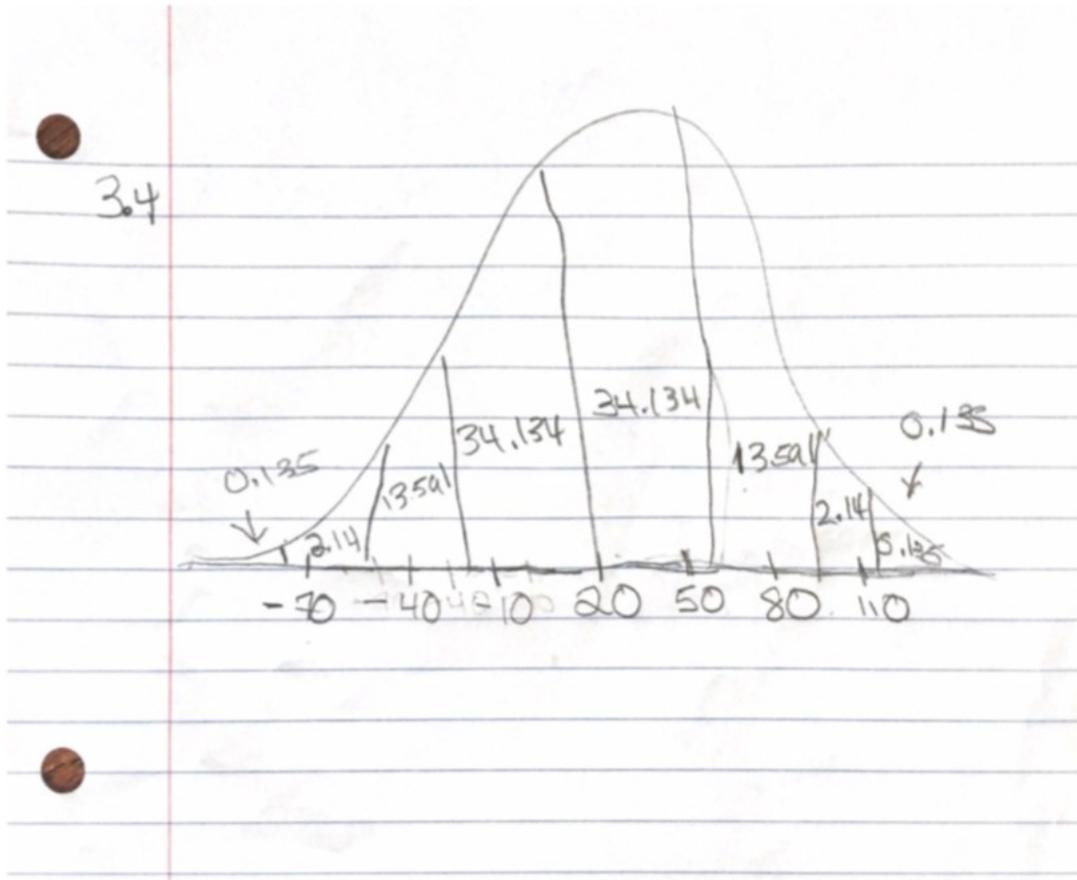
b. $y = 0.0067(50) - 0.455$

$y = 0.12$

c. $y = 0.0067(95) - 0.455$

$y = 0.1815$

3.4



a. 15.866%

b. 84.134%

c. $2.14 - 0.135 = 2.005\%$

d. 47.725%

3.8

1 year = 365 days

1.96×10^8 barrels of beer were made in a year

1 barrel = 31 US gallons

$1.96 \times 10^8 \times 31$ us gallons = 6076000000 US gallons per year

6.706×10^9 gallons a year being made

$6.706 \times 10^9 / 365 =$

18,372,602.74 gallons consumed a day

3.10

2.7×10^8 cars in the US

A regular driver gets 3 flats per year

Assuming that they change their tire and buy a new one

$3 \text{ new tires} \times 1 \text{ year} \times 2.7 \times 10^8 =$

8.1×10^8 tires a sold annually