

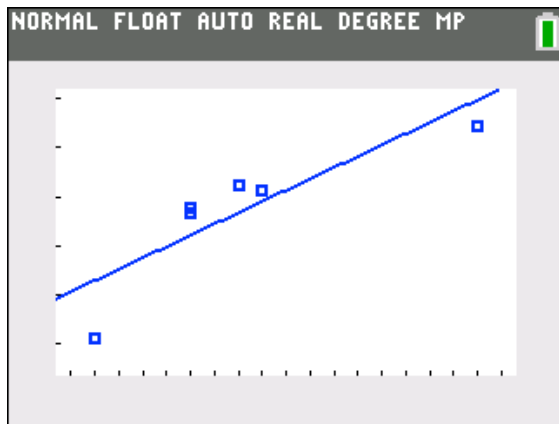
Scatter Plots and Lines of Best Fit

Day 2

Calories and Fat Per Portion of Meat & Fish

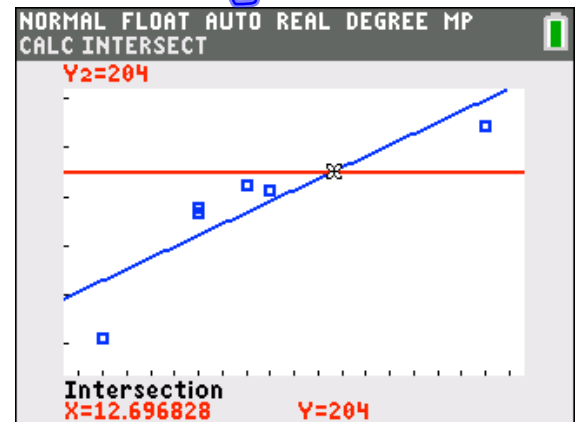
	Fat (grams)	Calories
Fish sticks (breaded)	3	50
Shrimp (fried)	9	190
Tuna (canned in oil)	7	170
Ground beef (broiled)	10	185
Roast beef (relatively lean)	7	165
Ham (light cure, lean and fat)	19	245

- Use your GDC to create a scatter plot and find the line of best fit.
- According to your line of best fit answer the following questions:
 - How many calories does a salmon steak have if it has 13 grams of fat?
 - How many grams of fat does a hamburger have if it has 204 calories?



$$y = 10.3x + 72.7$$

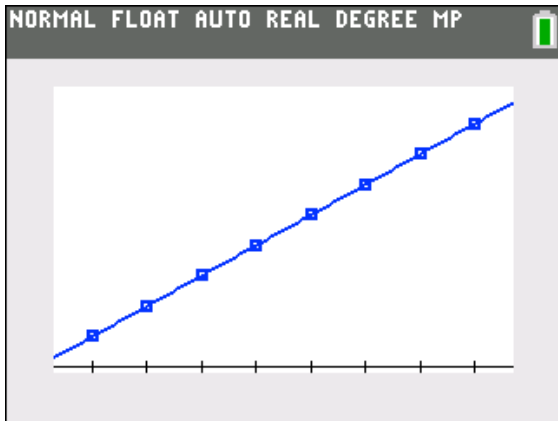
a) 207 calories
b) 12.7g



Amount Tyler Earns Babysitting

Hours	1	2	3	4	5	6	7	8
Amount	\$4	\$8	\$12	\$16	\$20	\$24	\$28	\$32

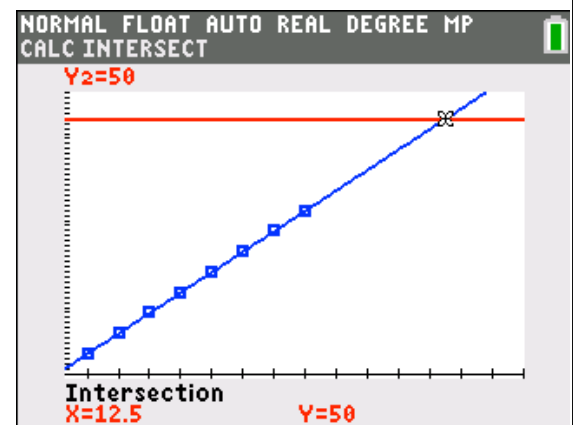
- Use your GDC to create a scatter plot and find the line of best fit.
- According to your line of best fit answer the following questions:
 - If Tyler babysits for 7.5 hours, how much can he expect to be paid?
 - If Tyler wants \$50 to go out to a nice dinner and movie, for how many hours does he need to babysit?



$$y = 4x$$

$$a) \$30$$

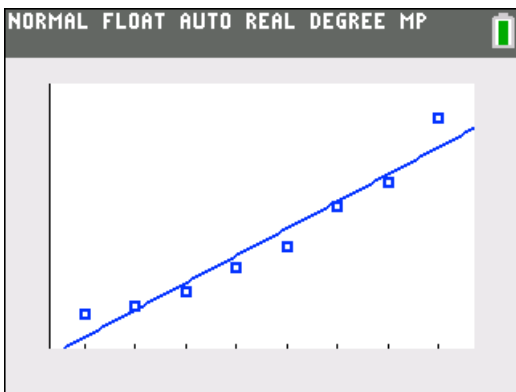
$$b) 12.5$$



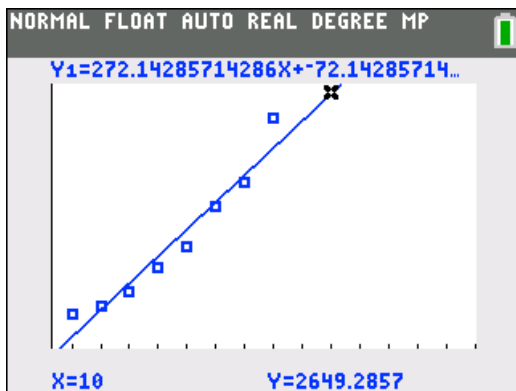
The table shows the number of people who have attended a neighborhood festival over an 8-year period.

Year, x	1	2	3	4	5	6	7	8
Attendance, y	420	500	650	900	1100	1500	1750	2400

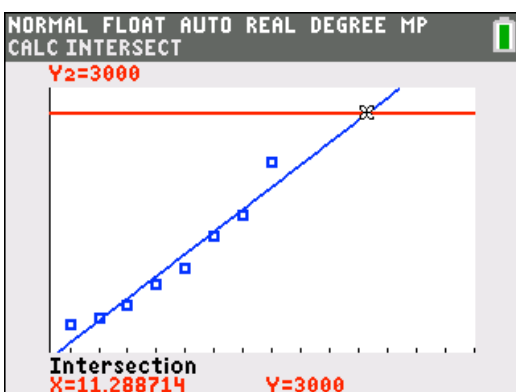
- Use your GDC to create a scatter plot and find the line of best fit.
- According to your line of best fit answer the following questions:
 - How many people are expected to attend in year 10?
 - In which year will the festival attendance break 3000 people?



$$y = 272.1x - 72.1$$



$$a) 2649$$



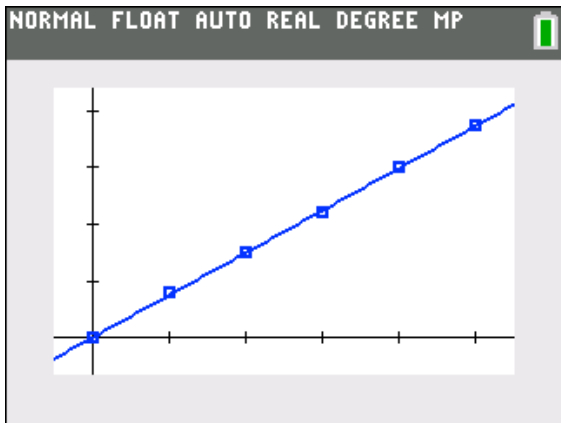
$$b) 11.3$$

12th year

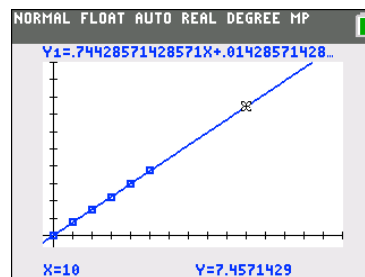
BLUEBERRIES The table shows the weights y of x pints of blueberries.

Number of Pints, x	0	1	2	3	4	5
Weight (pounds), y	0	0.8	1.50	2.20	3.0	3.75

1. Use your GDC to create a scatter plot and find the line of best fit.
2. Predict the weight of 10 pints of blueberries.
3. Blueberries cost \$2.25 per pound. How much do 10 pints of blueberries cost?



$$y = 0.74x + 0.04$$



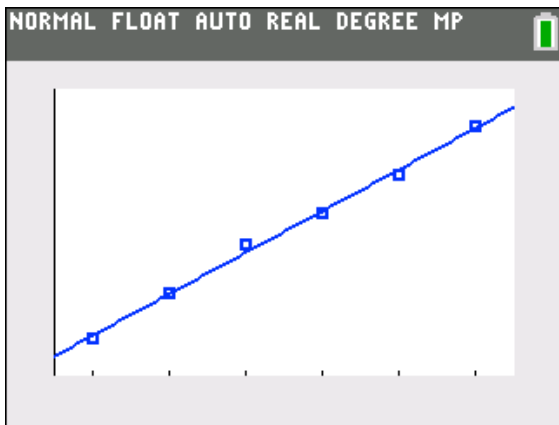
7.46

\$16.79

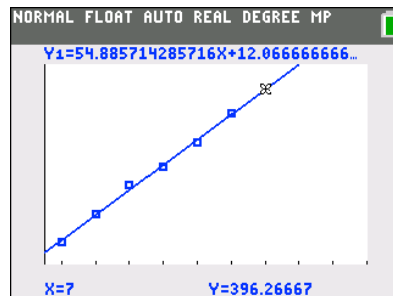
VACATION The table shows the distance you travel over a 6-hour period.

Hours, x	Distance (miles), y
1	62
2	123
3	188
4	228
5	280
6	344

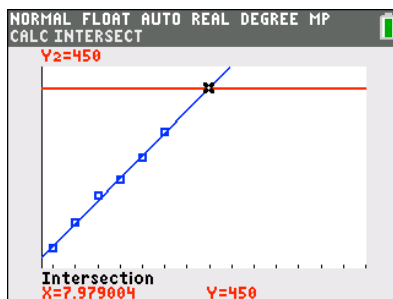
1. Use your GDC to create a scatter plot and find the line of best fit.
2. According to your line of best fit answer the following questions:
 - a. Predict how far you will have traveled in 7 hours.
 - b. If you want to travel 450 miles, how many hours must you travel?



$$y = 54.9x + 12.1$$



396.3 miles



7.98 hrs