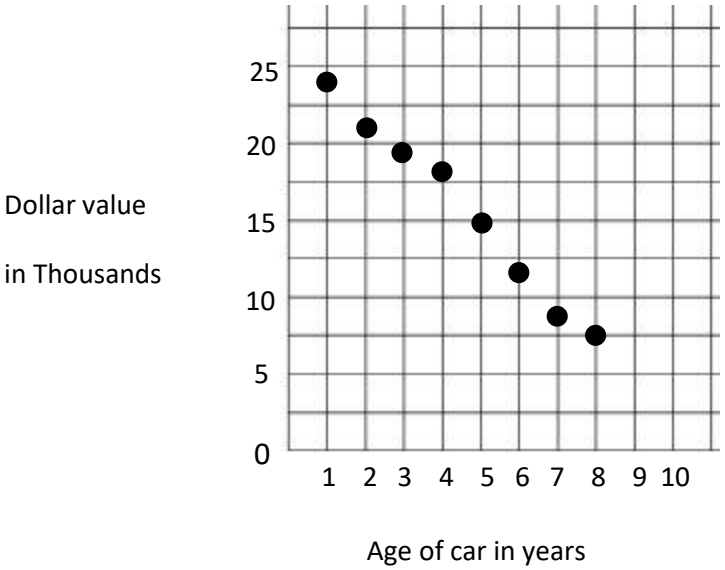
Practice Worksheet Scatter Plot and Line of Best Fit Name_____

Age of a Car (years), x	1	2	3	4	5	6	7	8
Value (thousands), y	$24	$21	$19	$18	$15	$12	$8	$7



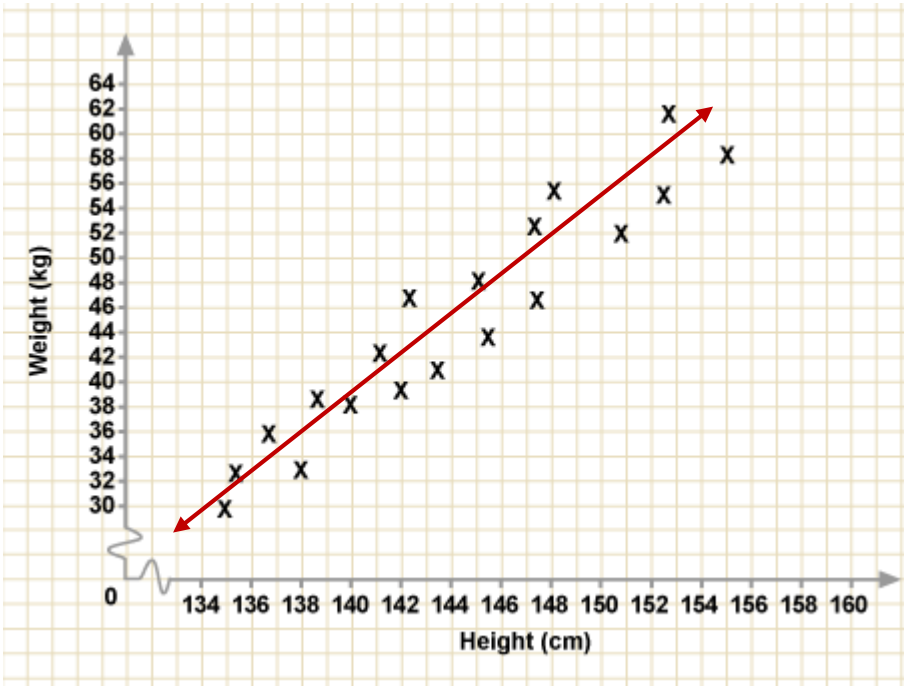
1) Determine the line of best fit for the data above.

4) Using the found equation predict the value of a car that is 3 and a half years old.

5) Interpret the slope of $\frac{-2}{1}$ in the context of the problem. (Hint: age of car and dollar value)

6) Interpret the y-intercept of 25 in the context of the problem.

7) Describe the relationship (if any) between car age and car value.



8) What is the expected weight of someone who is 150 centimeters tall?

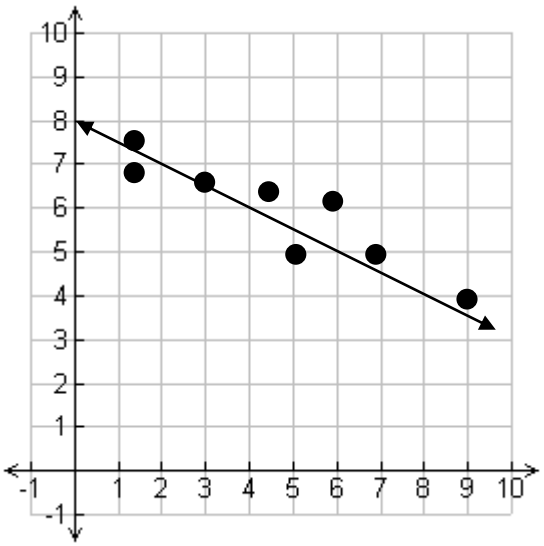
The following chart gives information on 10 high school students. The data shows how many hours per week each student watched and what their GPA is. Use the chart to answer questions 8-14 below.

Student	Hours per week watching tv	GPA
1	41	2.5
2	22	3.5
3	32	3.0
4	35	2.8
5	16	3.7
6	26	3.4
7	39	2.9
8	24	3.6
9	11	3.8
10	5	3.9

17) We used technology to find the equation of the line to be $y = -.05x + 4$. Using the equation what GPA would you expect someone to have if they watched TV for 40 hours?

18) In the equation what does the -.05 value for slope mean? What does the 4 value for y-intercept mean?

20)



Which equation best fits the data?

a. y= $\frac{1}{2}x + 8$ b. y= $-\frac{1}{2}x + 8$ c. y= $-5x - 6$ d. y= 3x – 8