Week 5, Day 1

x	y
1	2
2	7
3	12
5	22

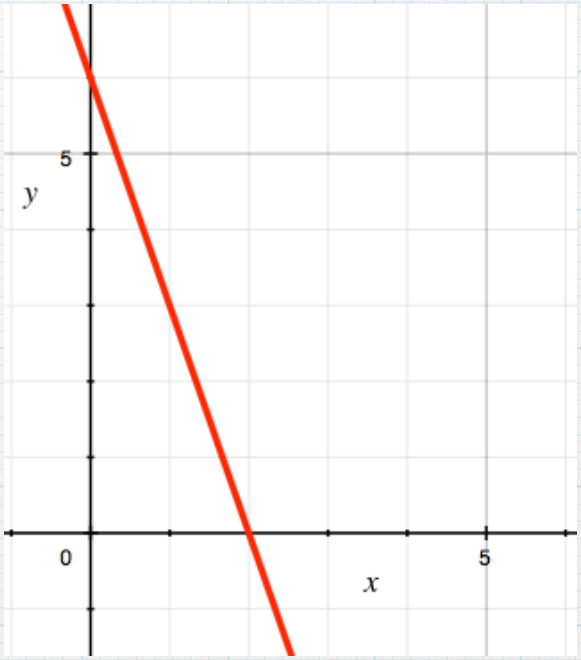
1) Write a linear function for the table shown.

y = 5x - 3

2) Write an equation to solve: On an algebra test, the highest grade was 42 points higher than the lowest grade. The sum of the two grades was 138. Find the lowest grade.

(L + 42)+L=138 Lowest grade = 48

3) Sketch the graph of $y = -3x + 6$ →



4) Write the equation for the line of best fit on the scatterplot shown.

y = 8x

5) Does the table shown represent a linear or exponential function? Explain how you know.

Exponential function; multiplies by 3

t	0	1	2	3
$f(t)$	5	15	45	135

Week 5, Day 2

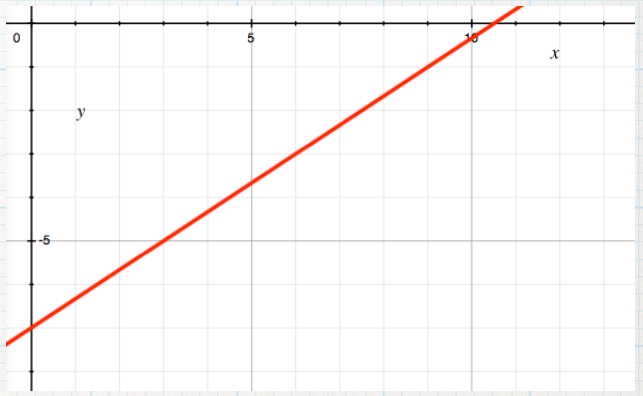
1) Write a linear function for the table shown.

x	-3	-2	-1	0	1	2	3
y	-6	-3	0	3	6	9	12

y = 3x + 3

2) Write an equation to solve: In a given amount of time, Jamie drove twice as far as Rhonda. All together they drove 90 miles. Find the number of miles driven by each.

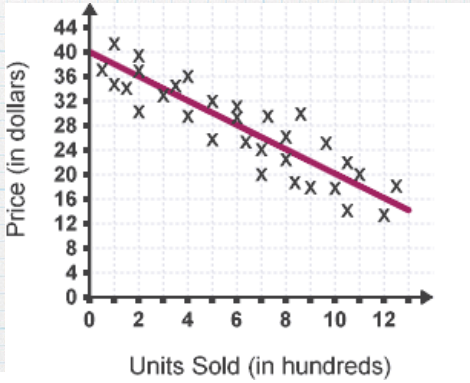
R + 2R = 90; They each drove 30 miles.



3) Sketch the graph of y = ⅔x - 7

4) Write the equation for the line of best fit on the scatterplot shown.

y = -2x + 40



5) Does the table shown represent a linear or exponential function? Explain how you know.

x	–6	0	2	4
$g(x)$	14	32	38	44

Linear function; constant slope of 3

Week 5, Day 3

Time (s)	Speed (m/s)
0	49.0
1	39.2
2	29.4
3	19.6
4	9.8
5	0.0

1) Write a linear function for the table shown.

y = 10.2x + 49

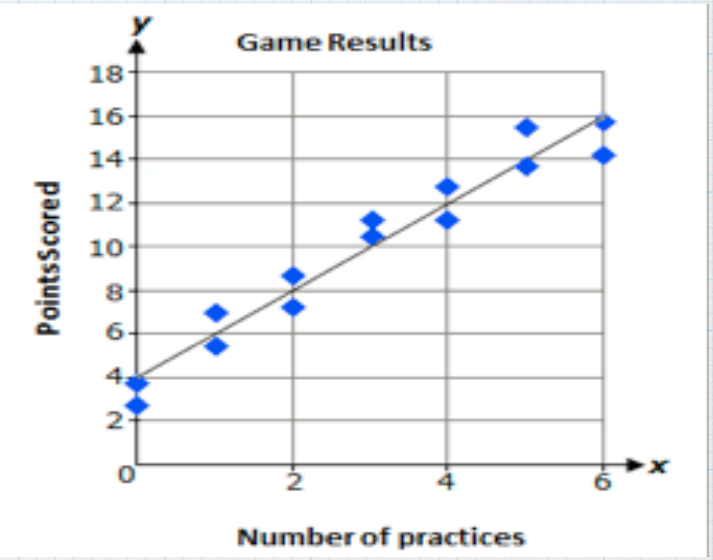
2) Write an equation to solve: Karen works for $6 an hour; 25% of her salary is deducted for taxes and insurance. How many hours must she work to take home $450 if she saves all of her earnings?

6h-.25(6h) = 450; 100 hours

3) Sketch the graph of x = -3

A vertical line at x = -3

4) Write the equation for the line of best fit on the scatterplot shown. **y = 2x + 4**



5) Does the table shown represent a linear or exponential function? Explain how you know.

Exponential function; multiply by 6

x	1	2	3	4
y	-2	-12	-72	-432

Week 5, Day 4

x	y
-2	-2
-1	2
0	6
1	10
2	14

1) Write a linear function for the table shown.

y = 4x + 6

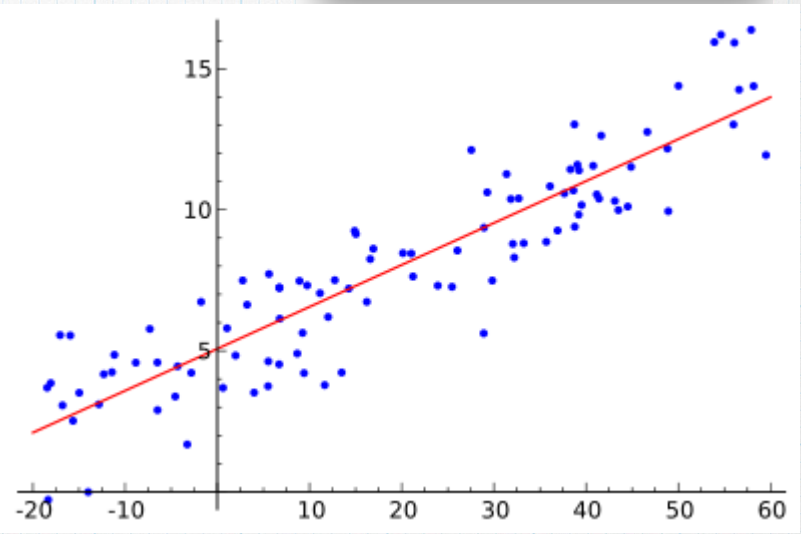
2) Write an equation to solve: The length of a rectangular map is 15 inches and the perimeter is 50 inches. Find the width.

50=2W + 30; width = 10 inches

3) Sketch the graph of $y = 8$

A horizontal line at y = 8

4) Write the equation for the line of best fit on the scatterplot shown.



y = ¼x + 5

5) Does the table shown represent a linear or exponential function? Explain how you know.

Time (seconds)	Radioactivity level
0	20
1	10
2	5
3	2.5
4	1.25

Exponential function; divide by 2

Friday Five

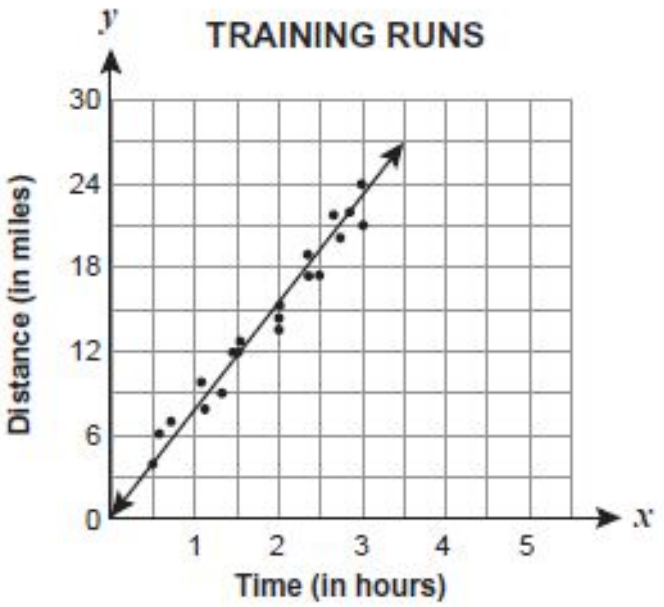
x	-3	-2	-1	0	1	2	3
y	-6	-3	0	3	6	9	12

1) Write a linear function for the table shown.

y = 3x + 3

2) Write an equation to solve: In a given amount of time, Jamie drove twice as far as Rhonda. Al[1] together they drove 90 miles. Find the number of miles driven by each.

R + 2R = 90; They each drove 30 miles.



3) Sketch the graph of y = 8

A horizontal line at y = 8

4) Write the equation for the line of best fit on the scatterplot shown. **y = 8x**

5) Does the table shown represent a linear or exponential function? Explain how you know.

x	1	2	3	4
y	−2	−12	−72	−432

Exponential function; multiply by 6