Name: KEY

Table/Graph/Equation/Situation Problems

Directions: For each problem, one form of a linear relationship is given – either a table, a graph, an equation, or a real-world situation written out in words. Based on which representation is given, you must create the other three. So, for example, if the equation is given, you must create a table (x-values from 0 to 5 is fine), a graph (be sure to scale your x and y-axis appropriately, and think about whether or not it would make sense to connect your dots!) and think of your own real-world situation that would match the equation.

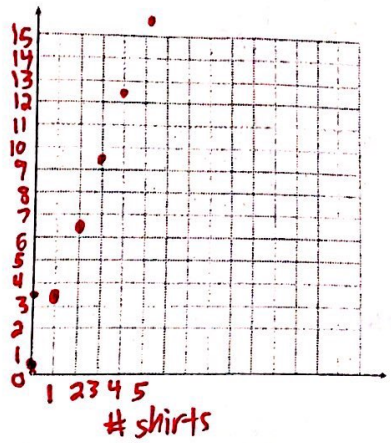
A

Table: (need graph, equation, situation)

Number	Cost
1	$3.50
2	$6.50
3	$9.50
4	$12.50
5	$15.50

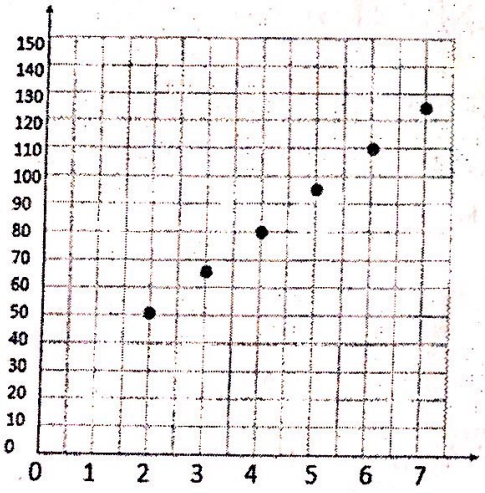
$y = 3x + 0.50$

Every t-shirt costs $3, plus a 50¢ shipping fee.



B

Graph: (need table, equation, situation)



X	Y	
2	50	+15
3	65	
4	80	
5	95	
6	110	
7	125	

(+1 between X = 2 and X = 3)

0 20
1 35

$y = 15x + 20$

Each t-shirt costs $15, plus a $20 shipping fee.

C

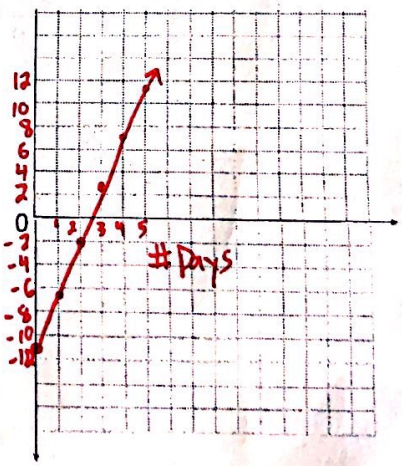
Situation: (need table, graph, equation)

The temperature on Sunday was -11°F. But the temperature has risen 4.5°F each day since then.

$y = -11 + 4.5x$

$y = 4.5x - 11$

X	Y
0	-11
1	-6.5
2	-2
3	2.5
4	7
5	11.5



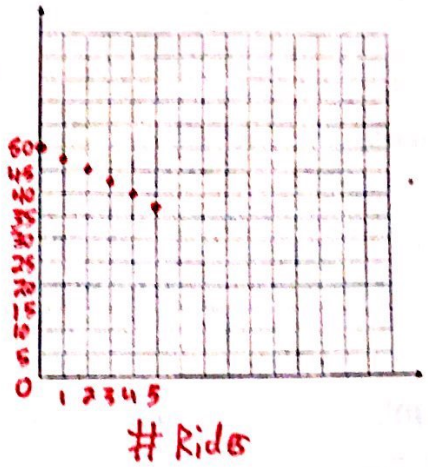
D

Equation: (need table, graph, situation)

$y = 50 - 2.5x$

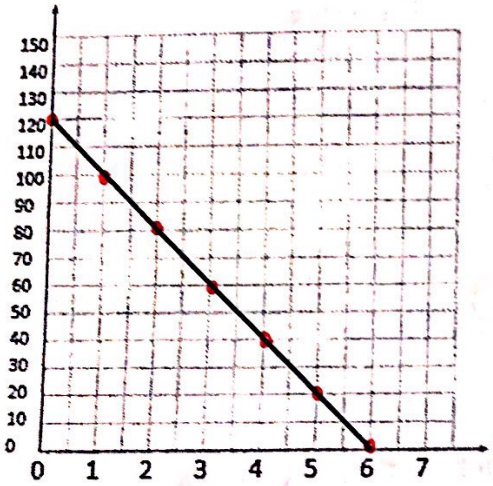
X	Y
0	50
1	47.5
2	45
3	42.5
4	40
5	37.5

You have $50, but you spend $2.50 on each ride you go on.



E

Graph: (need table, equation, situation)



X	Y
0	120
1	100
2	80
3	60
4	40
5	20
6	0

$y = -20x + 120$

~~You have $120, but I spend $20 on~~

The temperature is 120°F, but it decreases 20°F per minute until it hits 0°.

F

Table: (need graph, equation, situation)

x	y
1	75
2	150
3	225
4	300
5	375

$y = 75x$

Each t-shirt costs $75.