IM CW – 09/26/2017

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Name (First & last)

Write the slope-intercept form of the equation of each line given the slope and y-intercept.

1) Slope $= \frac{9}{4}$, y-intercept $= -4$

2) Slope $= -\frac{7}{4}$, y-intercept $= 5$

3) Slope $= 2$, y-intercept $= 4$

4) Slope $= -\frac{1}{2}$, y-intercept $= -2$

Write an equation in slope-intercept form for each table below. Show how you found the slope and y-intercept.

i.

x	y
0	0
1	2.5
2	5
3	7.5
4	10

ii.

x	y
0	6
1	7
2	8
3	9
4	10

iii.

x	y
0	−1.5
1	1.5
2	4.5
3	7.5
4	10.5

iv.

x	y
0	3
1	−1
2	−5
3	−9
4	−13

v.

x	y
1	1
2	5
3	9
4	13
5	17

Determine if the table represents a linear relationship, if yes, write an equation in slope-intercept form.

a.

x	2	4	6	8	10	12	14
y	0	1	2	3	4	5	6

b.

x	1	2	3	4	5	6	7
y	0	3	8	15	24	35	48

c.

x	1	4	6	7	10	12	16
y	2	−1	−3	−4	−7	−9	−13

Write a linear equation in slope-intercept form for the situation described below.

James and Shani share a veterinary practice. They each make farm visits two days a week. They take cellular phones on these trips to keep in touch with the office. James makes his farm visits on weekdays. His cellular phone rate is $14.95 a month plus $0.50 a minute. Shani makes her visits on Saturday and Sunday and is charged a weekend rate of $34 a month.

a. Write an equation for each billing plan.

b. Is it possible for James's cellular phone bill to be more than Shani's? Explain how you know this.