CW 3.3.3 Name _____

Real-Life Situation 1:

Marty saves $10 a week. In 8 weeks he has $92.

Independent Variable (x): # of weeks

Dependent Variable (y): $ saved

Slope/Rate of Change: $10/week

Write an ordered pair (x, y) from the situation above.

(weeks $) (8, 92)

How much money did Marty start with (y-intercept)?

8·10=80 ; 92−80=12 she started with $ in her account

Write an equation to represent the situation.

y=mx+b → y=10x+12

Real-Life Situation 2:

The temperature is increasing 3° per hour. 4 hours after you wake up the temperature is 10°.

Independent Variable (x): # of hours

Dependent Variable (y): temperature

Slope/Rate of Change: $\frac{3}{1}$ 3°/hour

Write an ordered pair (x, y) from the situation above.

(hours temp) (4, 10)

What was the temperature when you woke up (y-intercept)?

4·3=12 (hours ↑3) 10−12=−2

Write an equation to represent the situation.

y=3x+−2

Real-Life Situation 3:

Lori started a diet in which she was lost 2 pounds per week. On the 12th week of her diet she weighed 185 pounds.

Independent Variable (x): # of weeks

Dependent Variable (y): # of pounds

Slope/Rate of Change: $\frac{-2}{1}$ −2 lbs/week

Write an ordered pair (x, y) from the situation above.

(weeks pounds) (12, 185)

How much did Lori weigh at the start of her diet (y-intercept)?

12(−2)=−24 185−−24=185+24=209 she weighed 209 lbs

Write an equation to represent the situation.

y= −2x+209

Real-Life Situation 4:

When June babysits he makes $5 an hour. After babysitting the Smith's for 4 hours he has $37.

What is the slope? 5/1

Explain what it means in context of the problem.

He makes $5 per hour

Write an ordered pair from the situation above.

(4, 37)

Explain what it means in context of the problem.

Babysitting 4 hours gives him $37.

What is the y-intercept?

4·5=20 37−20=17

Explain what it means in context of the problem.

He started with $17.

Write an equation to represent the situation. y=5x+17