Using Algebra to Represent Real Life Situations

1. Matching: which expression best represents each situation?

My new order at Snack Shack	C = 5.50s + 6.00h
How much a cab costs	C = 3.00 + 0.50k
How much you make after working for 10 hours	P = 10w
How far Ms. Decker runs in a certain number of seconds (if she gets a head start)	d = 70 + 3.8 s
How far Usain Bolt runs in a certain number of seconds	d = 10.4 s

2. You use the expression y = 200 + 25x to describe a situation to a friend. Name as many different situations as possible that would match this expression.

Using Algebra to Solve Problems

1. I got paid 120 dollars for 10 hours of work. What is my hourly wage?

$$P = 10w$$

2. If I order 2 shack burgers, and the total cost of my order is $29, how many home burgers did I order?

$$C = 5.50s + 6.00h$$

3. If Usain Bolt can keep up his pace, how long will it take him to run 200 m?

$$d = 10.4\ s$$

4. If Ms. Decker can keep up her pace, and if she still gets a head start, how long will it take her to run 200 m?

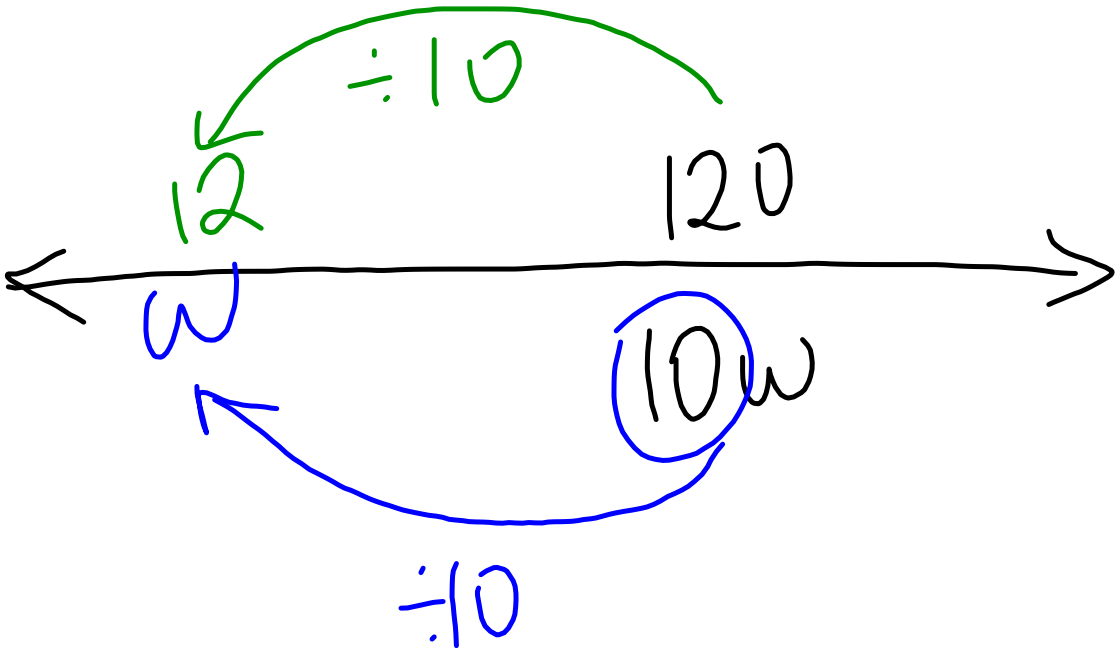
$$d = 70 + 3.8\ s$$

5. If my taxi ride costs $13, how far did I travel?

$$C = 3.00 + 0.50k$$

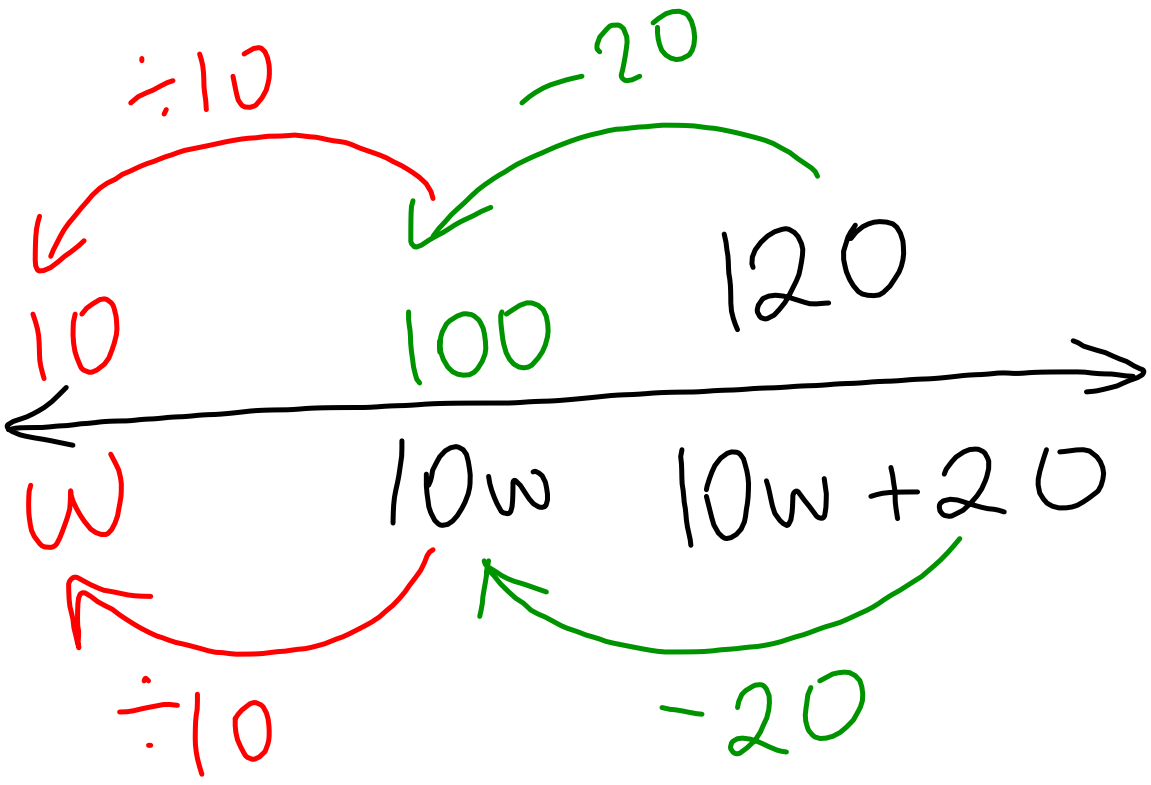
$$P = 10w$$

$$120 = 10w$$



$$\therefore w = 12$$

$$120 = 10w + 20$$



$$\therefore w = 10$$