

Classwork: Please get notes from a friend if you need help.

A mechanic is paid \$14.00 per hour for regular time and time and a half for overtime.

Write a function for the weekly wage, W , where h is the number of hours worked in a week.

Using your Function:

Evaluate $W(30)$, $W(40)$, $W(45)$ and $W(50)$.

Your favorite dog groomer charges according to your dog's weight. If your dog is 15 pounds and under, the groomer charges \$35. If your dog is between 15 and 40 pounds, she charges \$40. If your dog is over 40 pounds, she charges \$40, plus an additional \$2 for each pound over 40.

- Write a piecewise function that describes what your dog groomer charges.
- Graph the function.
- What would the groomer charge if your cute dog weighs 60 pounds?

During a 9 hour snowstorm, it snows at a rate of 1 inch per hour for the first 2 hours, at a rate of 2 inches per hour for the next 6 hours, and at a rate of 0.5 inches per hour for the final hour.

- Write piecewise function that gives the depth of the snow during the snowstorm.
- Graph the function.
- How many inches of snow accumulated from the storm?

Homework: Please complete on a piece of paper to turn in.

You plan to sell t-shirts as a fundraiser. The wholesale t-shirt company charges you \$10 a shirt for the first 75 shirts. After the first 75 shirts you purchase up to 150 shirts, the company will lower its price to \$7.50 per shirt. After you purchase 150 shirts, the price will decrease to \$5 per shirt.

- Write a function that models this situation.
- How much to you pay for an order of 180 shirts?
- If you instead had to pay \$10 per shirt no matter what the order size, how much more money would you have spent on 180 shirts?
- The club sells each shirt for \$15. If you purchased 180 shirts to sell, how many must you sell in order to break even with your expenses?
- If you sell all 180 shirts, how much did the club raise that it can spend for future expenses?