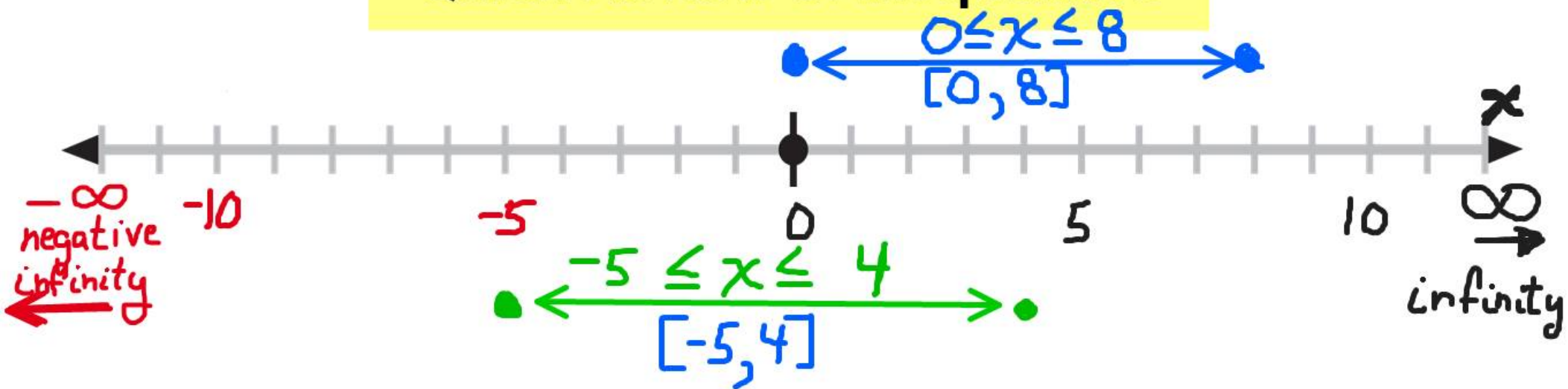


Stories From Graphs

MrF

What does the
graph 'say'?

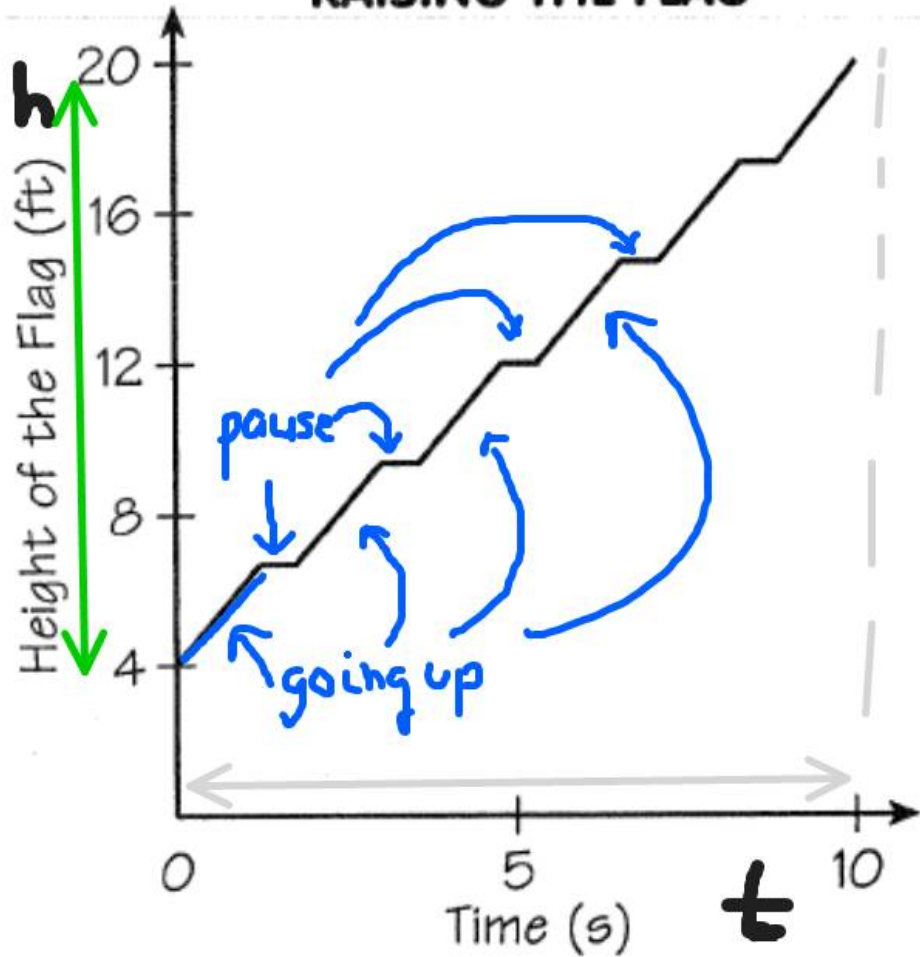
Quick Review of Inequalities



if x can be any
number
we say

$$-\infty < x < \infty$$
$$(-\infty, \infty)$$

RAISING THE FLAG

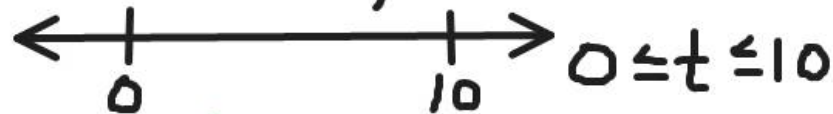


1. What happened to the flag? Why do you think the graph has this shape?
2. What is the domain of this function?
3. What is the range of the function?

h is a function of t .

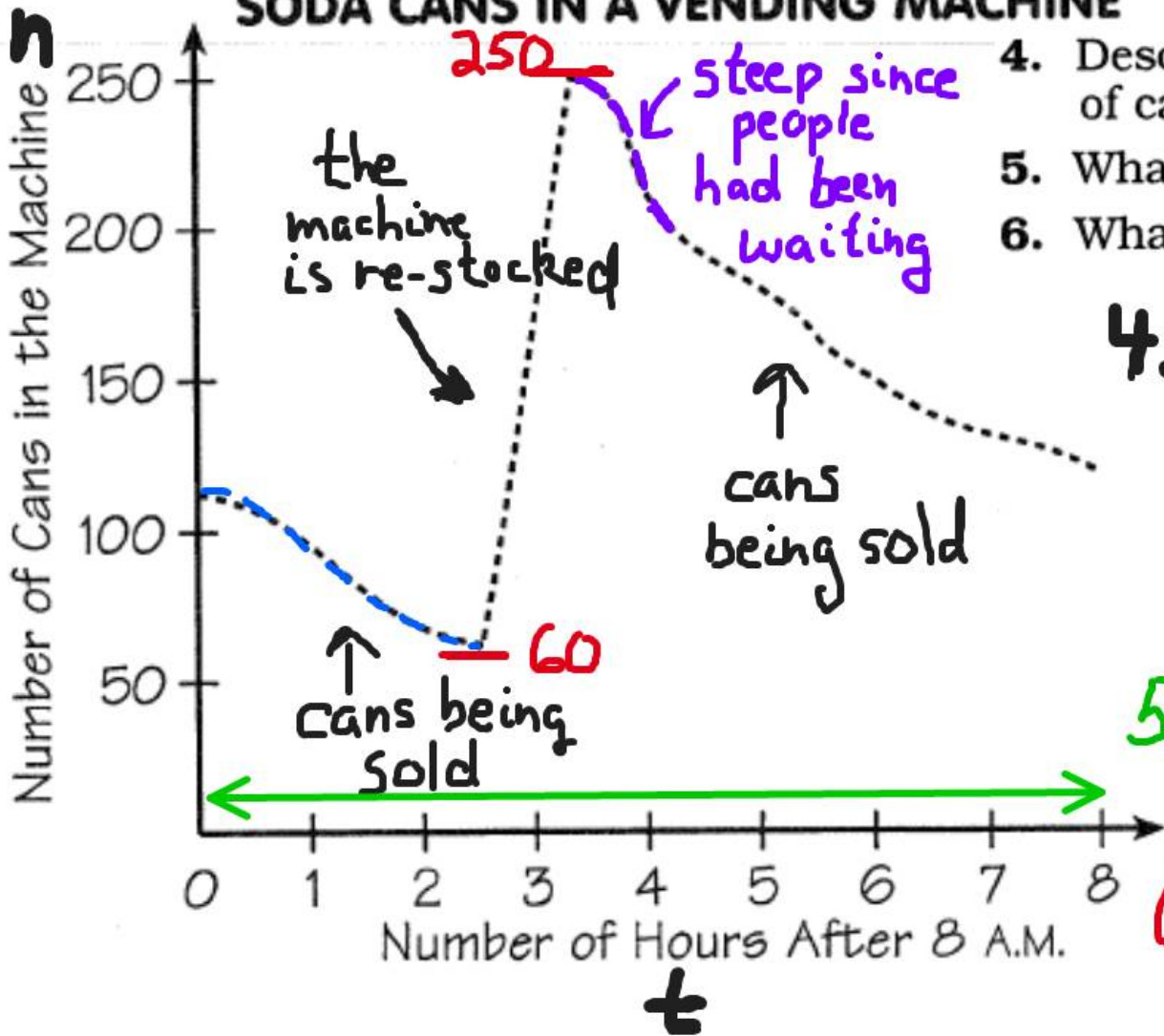
1) The flag height is changing (slope of line) then you pause to adjust your hands, then you keep pulling it up

2) Domain: time goes from 0 to 10



3) Range: $4 \leq h \leq 20$

SODA CANS IN A VENDING MACHINE



- Describe what happened to the number of cans of soda in the vending machine.
- What is the domain of this function?
- What is the range of the function?

4. ≈ 60 cans were sold from 8am to 10:30am. Then re-stocked with ≈ 190 cans. Then cans be sold again!

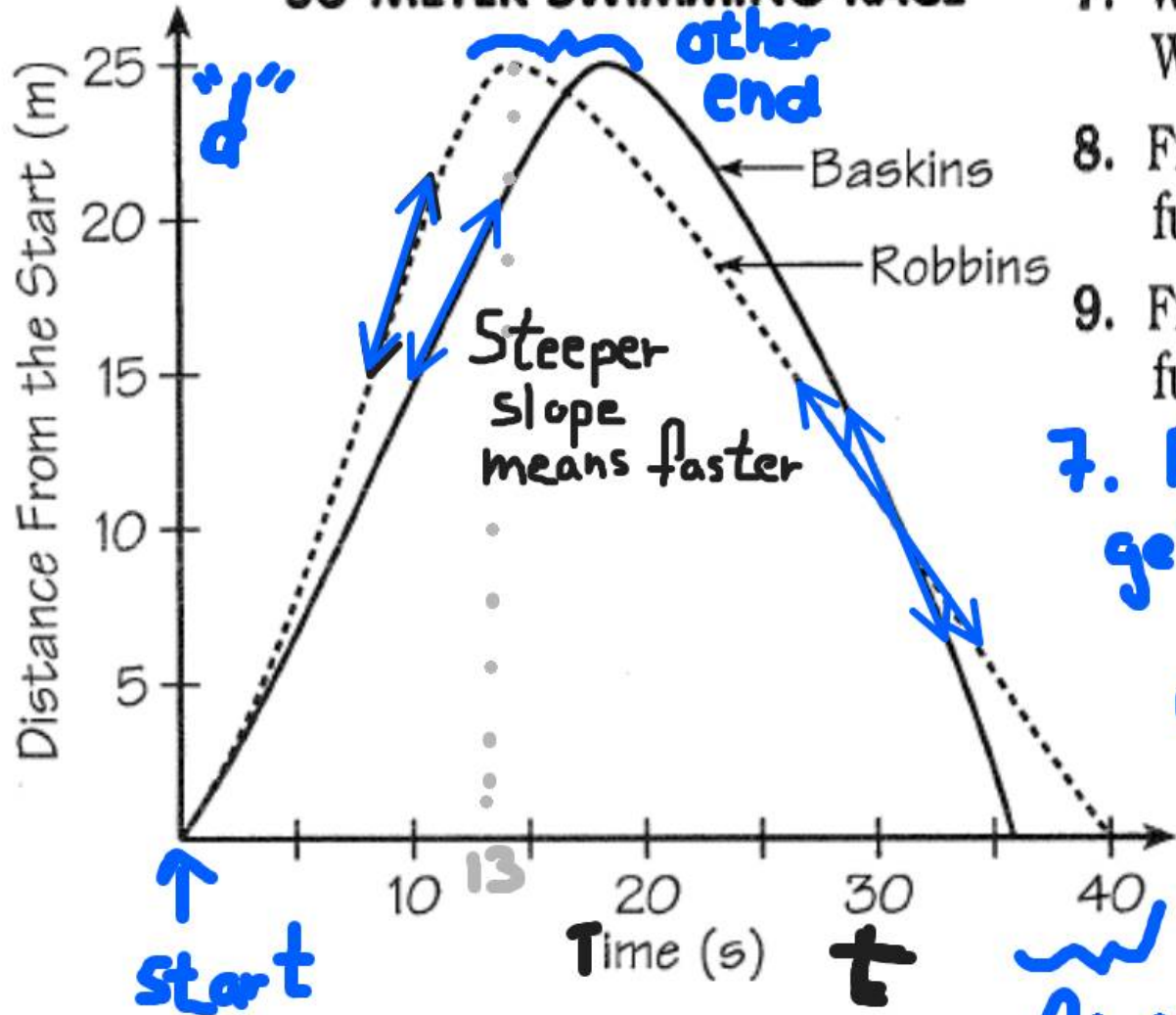
5. Domain: $0 \leq t \leq 8$ hrs after opening

6. Range: $60 \leq n \leq 250$ cans

Annotations for Range:

- 250 max
- 60 minimum

50-METER SWIMMING RACE



7. What happened in this swimming race? Who won the race?

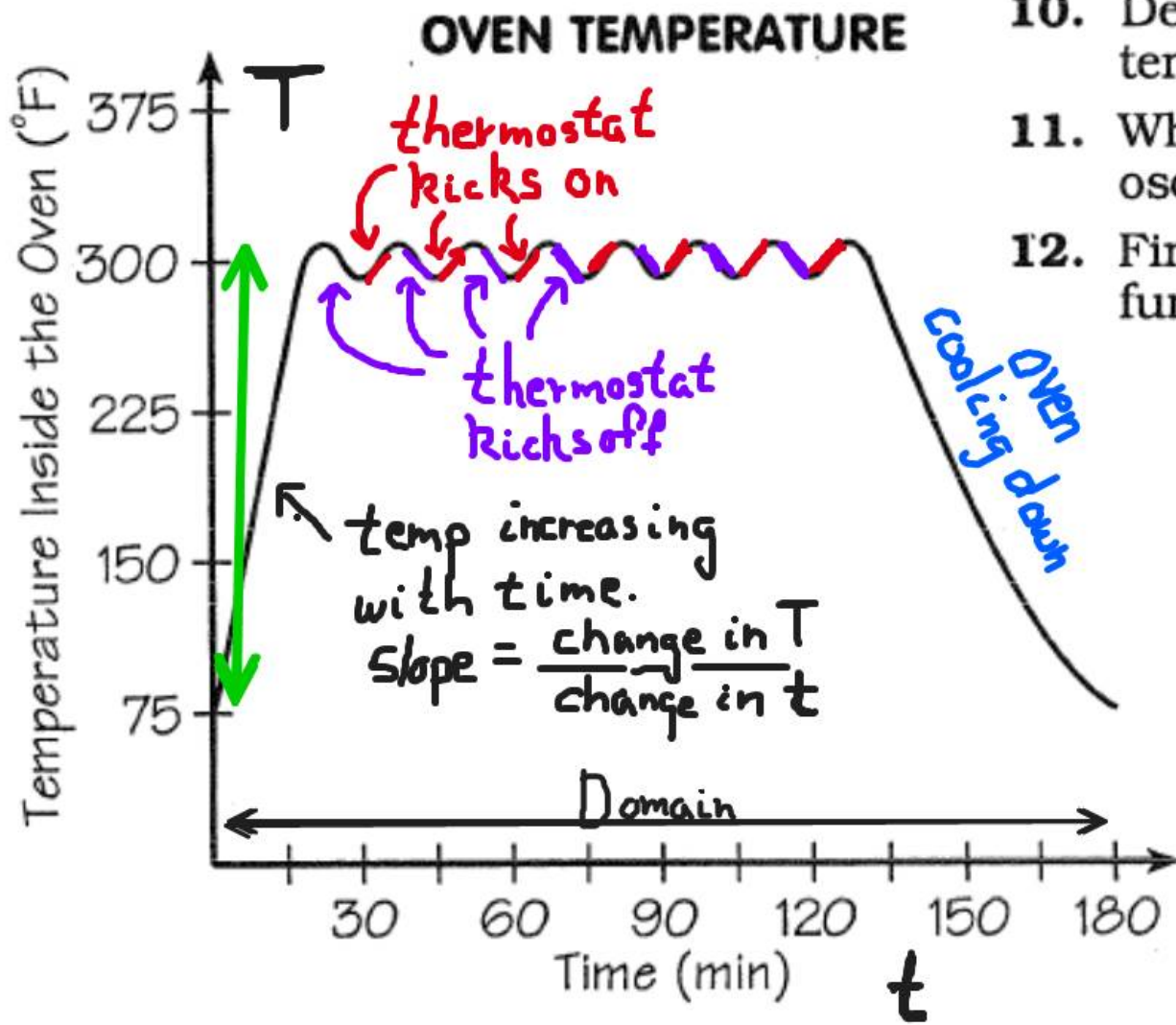
8. Find the domain and range of the function for Baskins.

9. Find the domain and range of the function for Robbins.

7. Robbins starts quicker gets to far end sooner. Baskins puts in a stronger effort on the way back and wins!

8. Domain: $0 \leq t \leq 40$ seconds

9. Range: $0 \leq d \leq 25$ metres



10. Describe what happened to the temperature inside this oven.
11. Why do you think the temperature oscillated around 300°F ?
12. Find the domain and range of the function.

11. Domain:
 $0 \text{ mins} \leq t \leq 180 \text{ mins}$

12. Range:
 $75^{\circ}\text{F} \leq T \leq 310^{\circ}\text{F}$