



# Motion Review

**Team Challenge!**



# Challenge 1

- **What is reference point?**



# Challenge 2

- **What is the average speed equation?**



# Challenge 3

- **What 2 things make up velocity?**

# Challenge 4



- **An ant traveled 10 centimeters in 5 minutes. Then he traveled another 10 centimeters in 5 minutes.**
- **Solve for the average speed.**

# Challenge 5



- **A runner traveled 18 miles in 2 hours to the north.**
- **What is the velocity?**

# Challenge 6



- **A car traveled 200 miles in 2 hours. Then it traveled another 200 miles in 3 hours.**
- **Solve for the average speed.**

# Challenge 7



- **A lion ran south. He traveled 100 meters in 5 seconds.**
  - **What is the velocity?**



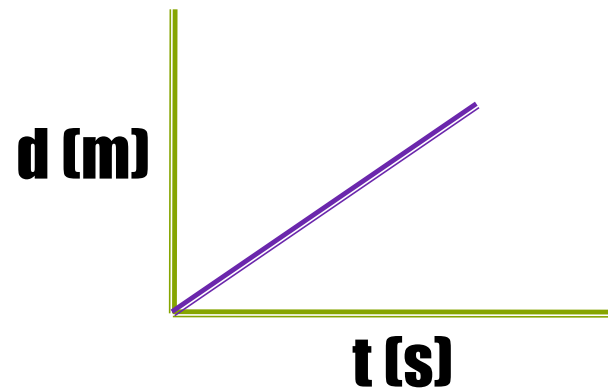
# Challenge 8



- **What has to CHANGE in order for the velocity to change?**

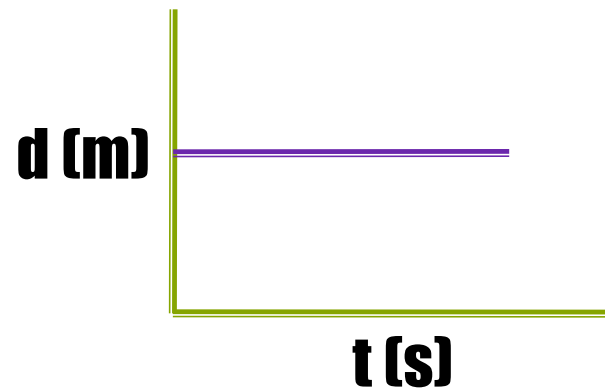
# Challenge 9

- **What type of speed does this graph represent?**



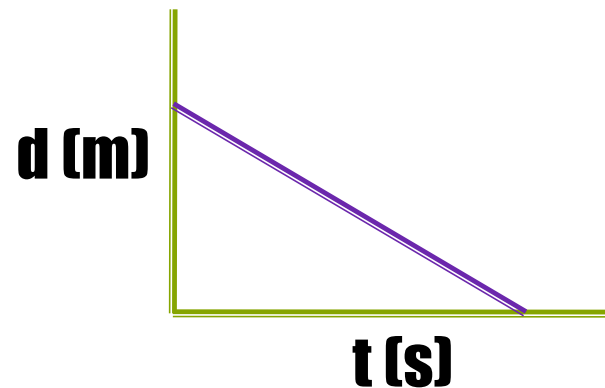
# Challenge 10

- **What type of speed does this graph represent?**



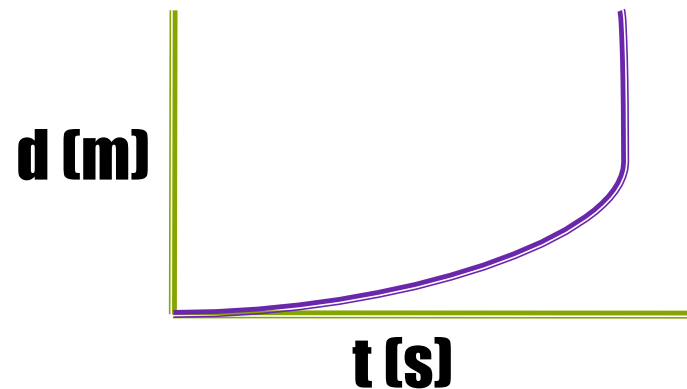
# Challenge 11

- **What type of speed does this graph represent?**



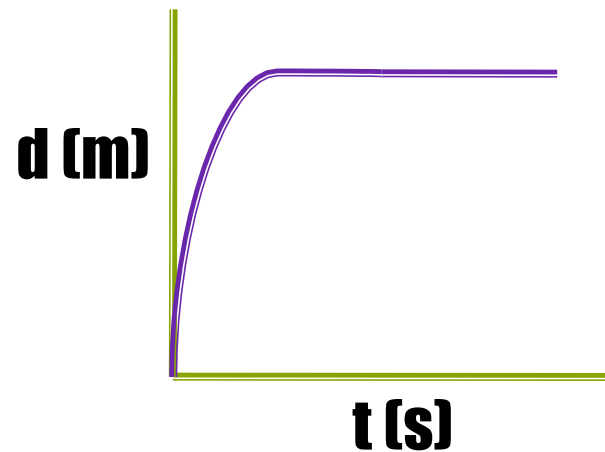
# Challenge 12

- **What type of speed does this graph represent?**



# Challenge 13

- **What type of speed does this graph represent?**



# Challenge 14



- **Graph the following scenario:**
- **A girl runs constant, medium speed. She stops to rest. Then she runs constant, fast speed.**

# Challenge 15

- **Graph the following scenario:**



- **The tortoise walked at a constant speed to the finish line. He then turned around and walked back to the reference point.**



# Challenge 16

- **Graph the following scenario:**
  - **The tortoise walked at a constant speed to the finish line. He then turned around and walked back to the reference point.**



# Challenge 17



- **Graph the following scenario:**
- **Ms. Salzburg decided to run a marathon. The farther she ran, the more tired she became so she slowed down. Eventually, she got so tired that she had to stop to rest.**

# Challenge 18

■ **Graph the following scenario:**

■ **A race car started off slow and then went faster and faster until it reached maximum speed.**



# Challenge 19

- **Graph the following scenario:**
- **A professional sprinter sped up as he ran the 100 meter race. As he got closer to the finish line, he slowed down and then stopped.**

