

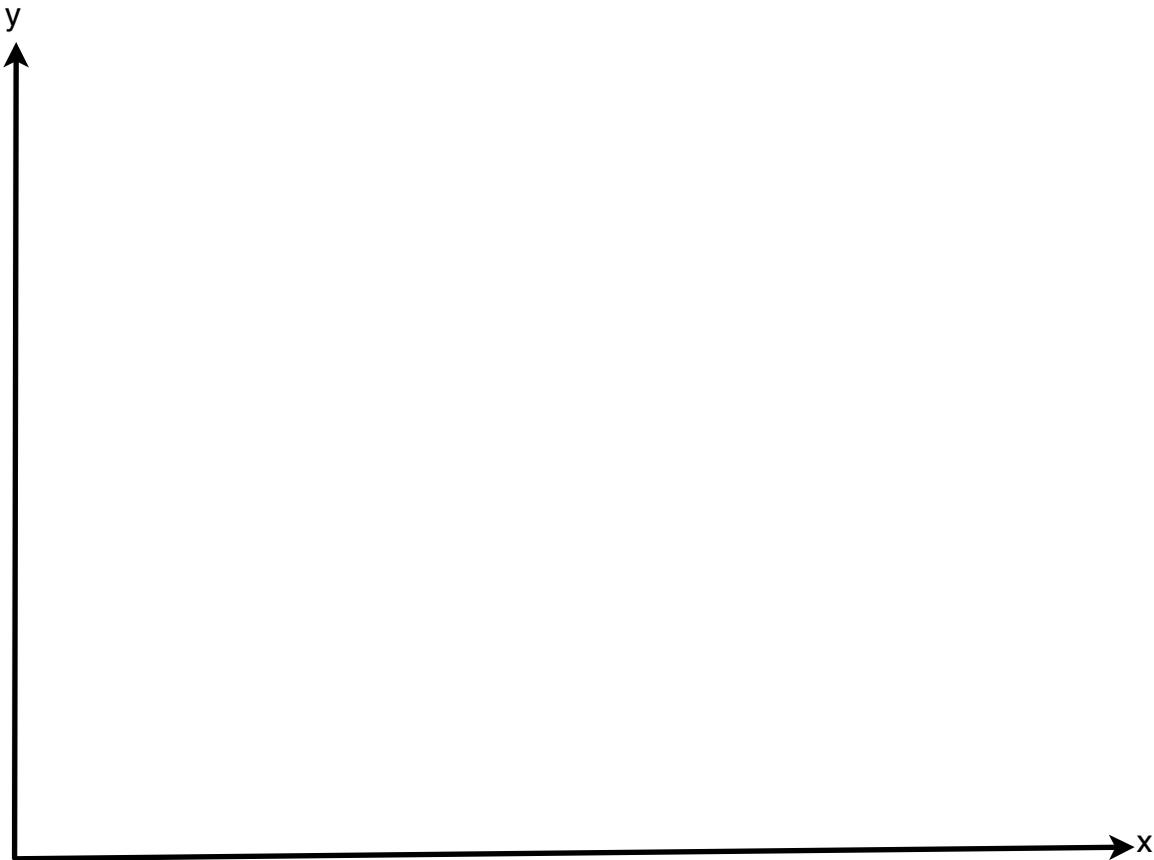
## Word to Graph Problems

Name \_\_\_\_\_

1. At 9:05, Joey was sitting quietly at his desk. Then the alarm bell rang, and Joey sprang up from his chair and rushed out of the room. He was then running faster down the hall until he bumped into the assistant principal at 9:06, when his speed dropped to zero. After a two minute chat, he then walked slowly to the detention room and arrived there at 9:10 and sat there for 2 hours.

Make a quick sketch of Joey's speed vs. time (with minute graduations) on the X axis. Make sure to mark the graduations of time.

Joey's speed



2. As soon as a soccer ball leaves the foot of the kicker, it's acceleration decreases. In other words, the highest acceleration of the soccer ball occurs just before it breaks contact with the kicker's foot. Graph the acceleration of a kicked soccer ball, starting with the moment it is just sitting there before it is kicked (acceleration = 0).



## Word to Graph Problems

Name \_\_\_\_\_

3. Jessica is interested in improving her net ball skills so she wants to see how explosively she can vertically jump, and is interested in the optimal knee bend amount. She found that the optimal amount of knee bend was between no knee bend, and a deep knee bend to the floor.

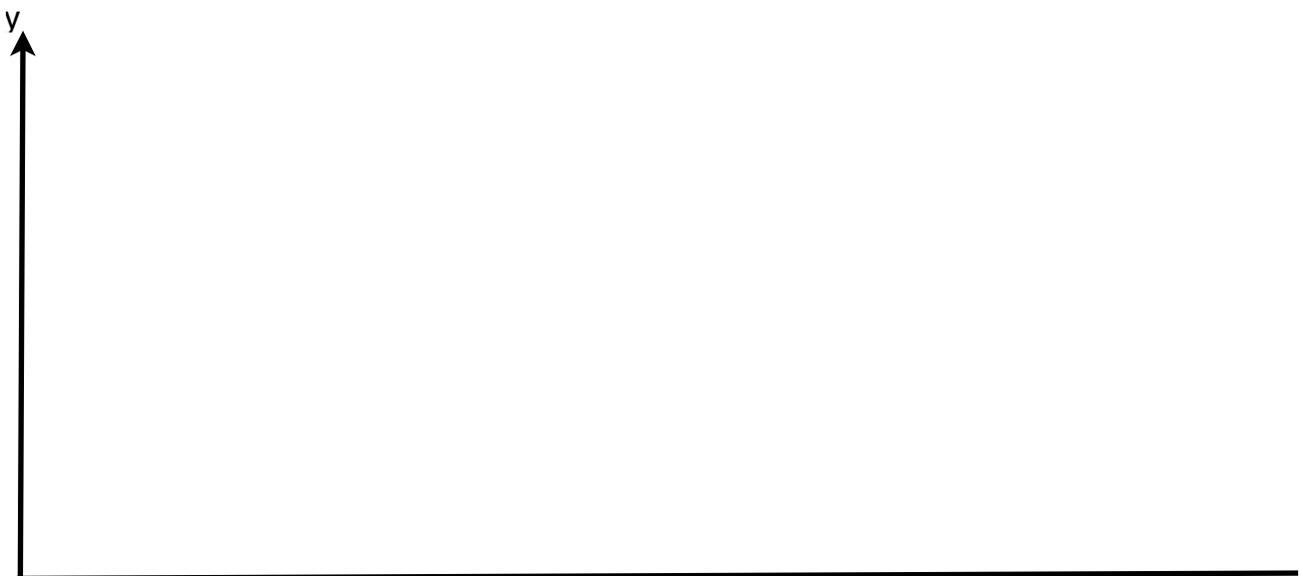
She took this data:

Jessica's Jump Data	
Amount of knee bend (%)	Height of Jump (cm)
0	10
20	30
40	60
60	110
80	85
100	70



*(If you know more about net ball than me, fill in your own data for the heights of the jumps).*

Graph this data. Don't forget the **title** of the graph.



When looking at the graph, as if for the first time, make sure your viewer can quickly see Jessica's optimal knee bend percentage.