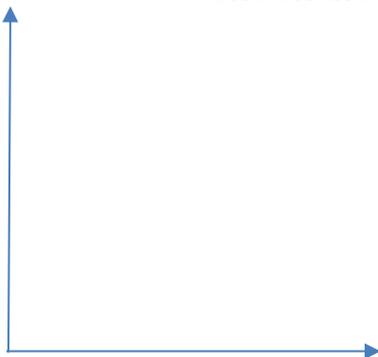# Water Towers Problem

A town has 2 water towers that serve its citizens. The tower on the east side of town has 900 kiloliters of water at 8:00 A.M., while the west tower has 300 kiloliters of water. The east tower is losing 50 kiloliters of water per hour, while the west tower is gaining 50 kiloliters every **2** hours.
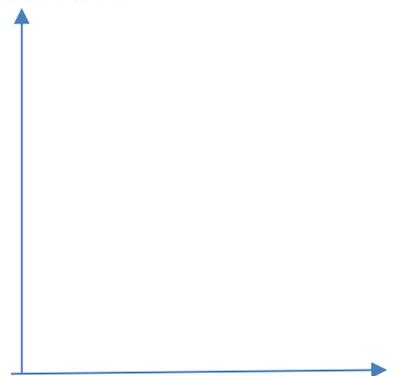
Create a table of values for each tower.

ELAPSED TIME	EAST TOWER VOLUME (kL)	WEST TOWER VOLUME (kL)

Sketch the graph of the volume of water over time in each tower.

East Tower

West Tower

How well do you understand?

1) What is the significance of the two points on the y-axis?

2) Which graph would eventually intersect the x-axis? What would this point tell us?

3) What kind of relationship do your graphs represent?

4) How do you know that the relationship you stated in question #3 is correct?

5) What are the equations for the East Tower and the West Tower?

East:

West: