

## Opposing Changes

Imagine that you are emptying a swimming pool using a pump that removes 5 gallons of water each minute. Meanwhile, your friend turns on a hose that adds 5 gallons of water to the pool each minute.

1. What happens to the water level of the swimming pool?
2. What would happen to the water level of the swimming pool if you increased the rate that the pump removed water to 7 gallons of water each minute?

### ANSWERS

1. The water level stays the same.
2. The water level would go down.