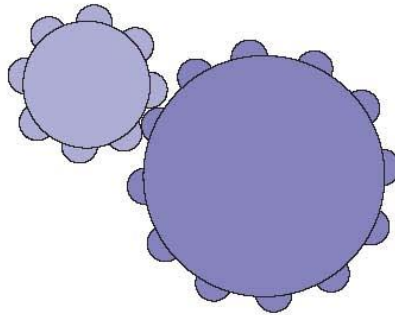


Connected Gears Problem

Say you have a small gear with 8 teeth connected to a big gear with 12 teeth.



1. If the small gear turns clockwise, which direction does the big gear turn? Why?
2. If you turn the small gear a certain number of times, does the big gear turn more revolutions, fewer, or the same amount? How can you tell?
3. Find a way to keep track of how many revolutions the small gear makes. Find a way to keep track of how many revolutions the big gear makes. How can you keep track of both at the same time?

Follow up question:

If the smaller gear turns 96 times, how many times will the bigger gear turn?