

Variables and Patterns Homework for Lesson 1.4

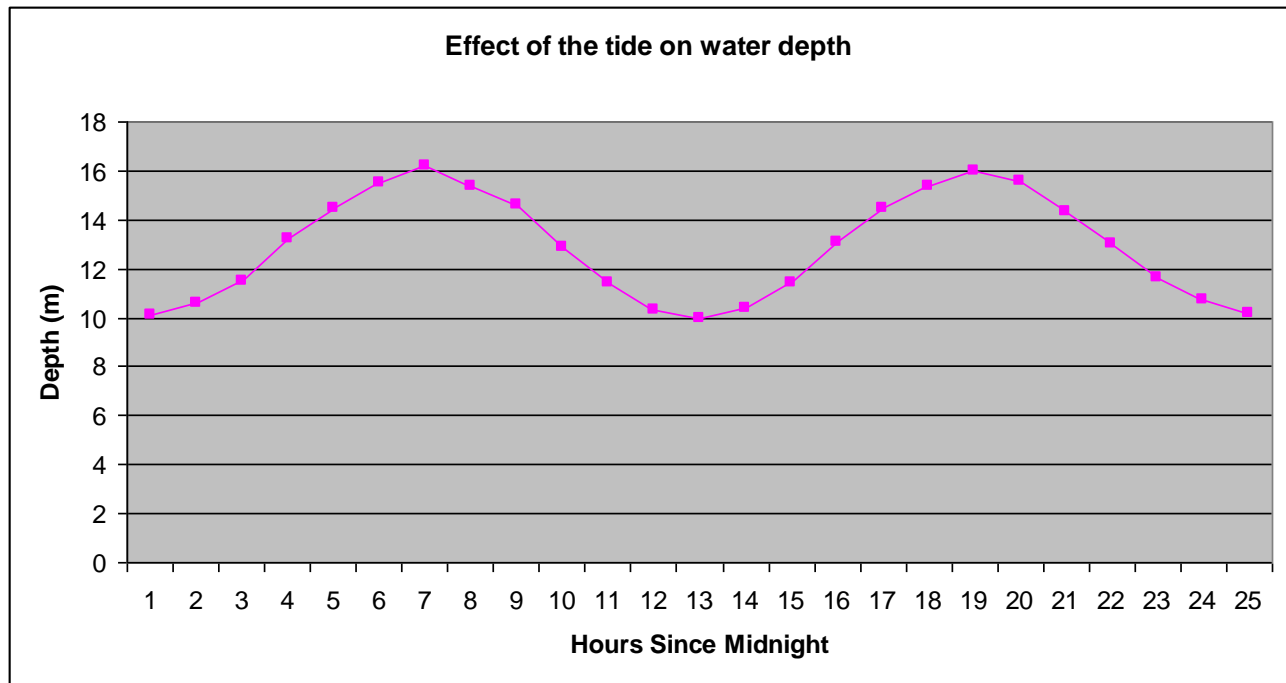
5. Below is a chart of the water depth in a harbor during a typical 24-hour day. The water level rises and falls with the tides. **What are the two variables?**

Effect of the Tide on Water Depth

Hours Since Midnight	0	1	2	3	4	5	6	7	8
Depth (m)	10.1	10.6	11.5	13.2	14.5	15.5	16.2	15.4	14.6

Hours Since Midnight	9	10	11	12	13	14	15	16
Depth (m)	12.9	11.4	10.3	10.0	10.4	11.4	13.1	14.5

Hours Since Midnight	17	18	19	20	21	22	23	24
Depth (m)	15.4	16.0	15.6	14.3	13.0	11.6	10.7	10.2



- At what time is the water the deepest? Find the depth at that time
- At what time is the water the shallowest? Find the depth at that time
- During what time interval does the depth change most rapidly?
- Describe the overall pattern you see of the coordinate graph.