

*Math Circle 9/16/2016 Meeting: Warm-up problems*

(Source: A Moscow Math Circle: Week-by-Week Problem Sets)

Problem 1. Given a water faucet and a cylindrical pot, how can you fill the pot exactly halfway with water?

Problem 2. Why are manhole covers circular rather than a square?

Problem 3. Is it possible to place six identical unsharpened pencils in a configuration where each pencil touches all the other ones?