I don’t think it is suitable to use inheritance in case of cylinder and circle. In heritance is used in case of IS-A relationship. So here inheriting Cylinder from circle gives the meaning of ‘Cylinder is a Circle’. Additionally, there is another relation required for using inheritance that it must satisfy Liskov Substitution Principle. So, to use LSP lets say,

Circle c = new Cylinder(7, 10);

This is statement that doesn’t makes sense at all and neither it can compute volume though we have created instance of cylinder. So, It doesn’t make sense at all to use inheritance in the problem.