

Physics 203: Quiz 4

October 1, 2012

Note: Please write down any formulae before plugging numbers into them.

1. A little girl is spinning a stone tied to a string above her head in a (mostly) horizontal plane.
 - (a) Draw a picture and Show **all** the forces acting on the stone.
 - (b) If the radius of the string is 30cm and the tangential speed of the stone is 1m/s, what is the tension in the string?
 - (c) Draw (in a new picture) the path that the stone takes when the string snaps.