Desolve by power series Method otherwise will wot accepted

(13) Using Laplace Transforms to Solve the ODE

1"+3y'+2.25y = 9t +64, y(0)=0, y'(0) = 31.5

(19) (y-x)dy = (n+y)dy

(15) Find orthogonal trajectory of

y= x-1+ ce, Where c is arbitrary Constant.