

Quiz 2 SHOW ALL WORK

Sept 20, 2018

[10] 1.) Solve  $ty' + (t + 1)y = t$

Answer: \_\_\_\_\_

[10] 2.) Suppose  $\phi_n$  is defined by successive approximation where  $y' = \frac{2t}{y+1}$ ,  $y(0) = 0$ .

If  $\phi_1(t) = t^2$ , then  $\phi_2(t) =$  \_\_\_\_\_