

Name: _____

Please take your time and answer each question clearly and carefully. For this quiz, you will not need a calculator. Do not use one.

Note: Remember that the $+C$ will be added on at the step where you do the integration. Depending on how you solve for y , it may not be just a $+C$ tacked on at the end by the time you are done!

1. Solve the following initial-value problem:

$$\frac{dy}{dt} = 1 - y$$

$$y(0) = 1/3$$

TURN OVER

2. Solve the following differential equation.

$$y' = t^3 y^2$$