3. [8 points] A *Whiffle Ball* is a lightweight plastic ball with holes in at least one hemisphere. If we assume a viscous friction, the upward motion of a thrown or hit whiffle ball may be described in terms of its velocity v or vertical position y by $v' = -\frac{c}{m}\, v - g$ or $y'' = -\frac{c}{m}\, y' - g$. In this problem we take $c/m = 10$ and $g = 10$ (that is, approximately 9.8 m/s^2). If we start with $y(0) = 0$ and $v(0) = 5$ m/s, find the velocity v and position y of the ball.

$v =$ _____

$y =$ _____