

# Calculus AB

6-2  
(Day 1)

Differential Equations: Exponential Growth and Decay

---

Direct Variation -

Inverse Variation -

Joint Variation -

Exponential Variation -

Solve the differential equation. (pg 420)

$$2) \frac{dy}{dx} = 6 - x$$

$$4) \frac{dy}{dx} = 6 - y$$

Solve the differential equation.

$$8) y' = x(1 + y)$$

Write and Solve the differential equation that models the verbal statement.

12) The rate of change of  $P$  with respect to  $t$  is proportional to  $25 - t$

Assignment: pg 420 1-27 odd
-----------------------------------