

Calculus Eighth Edition

Larson/Hostetler/Edwards

Name _____

Date _____

Class _____

Instructor _____

6.2 Exercise 15 (page 418)

A differential equation, a point, and a slope field are given. (a) Sketch two approximate solutions of the differential equation on the slope field, one of which passes through the given point. (b) Use integration to find the particular solution of the differential equation and use a graphing utility to graph the solution. Compare the result with the sketch in part (a).

$$\frac{dy}{dx} = x(6 - y), \quad (0, 0)$$

