

MATH 102:112, CLASS 18 (TUE NOV 6)

Qualitatively analyze the following differential equations. (Use the graph of dy/dt vs y to get you started.)

$$(1) \frac{dy}{dt} = -(y - 2)(y + 1)$$

$$(4) \frac{dy}{dt} = y(y - 2)^2(y + 1)$$

$$(2) \frac{dy}{dt} = (y - 2)^2$$

$$(5) \frac{dy}{dt} = \sin y$$

$$(3) \frac{dy}{dt} = y(y - 2)(y + 1)$$

$$(6) \frac{dy}{dt} = y^2 + 5$$

