[6] 5. This problem involves an LP where some cost coefficients are not specified:

maximize 
$$\zeta = c_1 x_1 + c_2 x_2$$
  
subject to  $x_1 + x_2 \leq 4$   
 $x_2 + x_3 \leq 2$   
 $x_1 - x_3 \leq 3$   
 $x_1, x_2, x_3 \geq 0$ 

Suppose a dual minimizer has the form  $y^* = (3, 1, \gamma)$  for some  $\gamma$ . Find the maximum value of  $\zeta$ .