

## Exercise 5

Reduce the elliptic equation

$$u_{xx} + 3u_{yy} - 2u_x + 24u_y + 5u = 0$$

to the form  $v_{xx} + v_{yy} + cv = 0$  by a change of dependent variable  $u = ve^{\alpha x + \beta y}$  and then a change of scale  $y' = \gamma y$ .