

```
def react_fct (uval):  
    # problem dependent function for reaction terms  
    #  
    # ***** TODO *****  
    # implement the correct reaction function  
    # *****  
    #  
    alpha = 1500 # Values from 3b  
    rb = 0.015  
    mu = 35  
    u1 = uval[0]  
    u2 = uval[1]  
    x = rb*(1+(u1*u1)/u2) - mu*u1  
    y = rb*u1*u1 - alpha*u2  
    return x,y
```