

# 数学作业纸

(科目: )

班级:

姓名:

编号:

第 页

$$2. d^{(k)} = -g^{(k)} + \beta_k d^{(k-1)}$$

$$d^{(k)T} Q d^{(k)} = d^{(k)T} Q (-g^{(k)} + \beta_k d^{(k-1)})$$

$$= -d^{(k)T} Q g^{(k)} + \beta_k d^{(k)T} Q d^{(k-1)}$$

$\therefore d^{(k)}, d^{(k-1)} Q$  conjugate.  $\square$