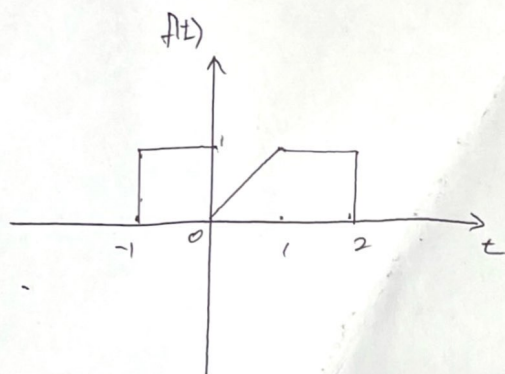
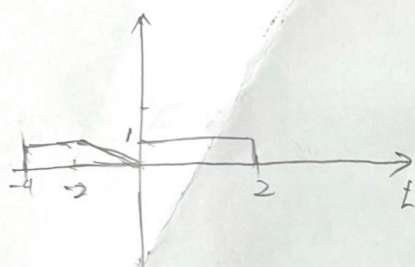


作业1 2021080070 431 韩佑硕

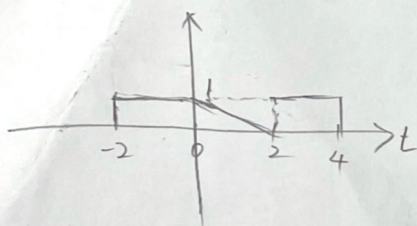
已知  $f(t)$  的图形如下所示，请画出  $y(t) = 3f(1 - \frac{t}{2}) - 1$  的图形



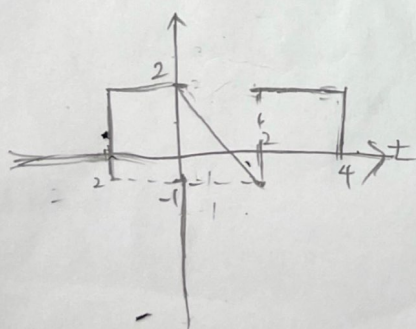
解: 先做时域运算  $f(-\frac{t}{2})$   $(-\frac{1}{2})$



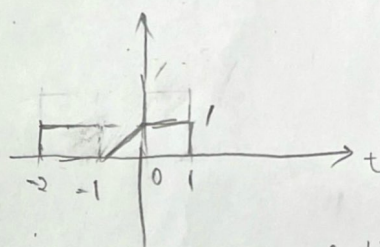
再做平移运算  $f(-\frac{1}{2}(t-2))$   $(2)$



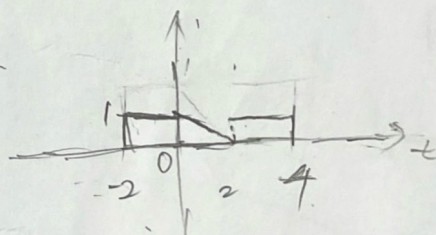
最后线性运算得最终结果  $3f(1 - \frac{t}{2}) - 1$



或也可以先做平移  $f(t+1)$   $(-1)$



再做压缩  $f(-\frac{1}{2}(t+1))$   $(-\frac{1}{2})$



最后同样做线性运算  $3f(-\frac{1}{2}(t+1)) - 1$

