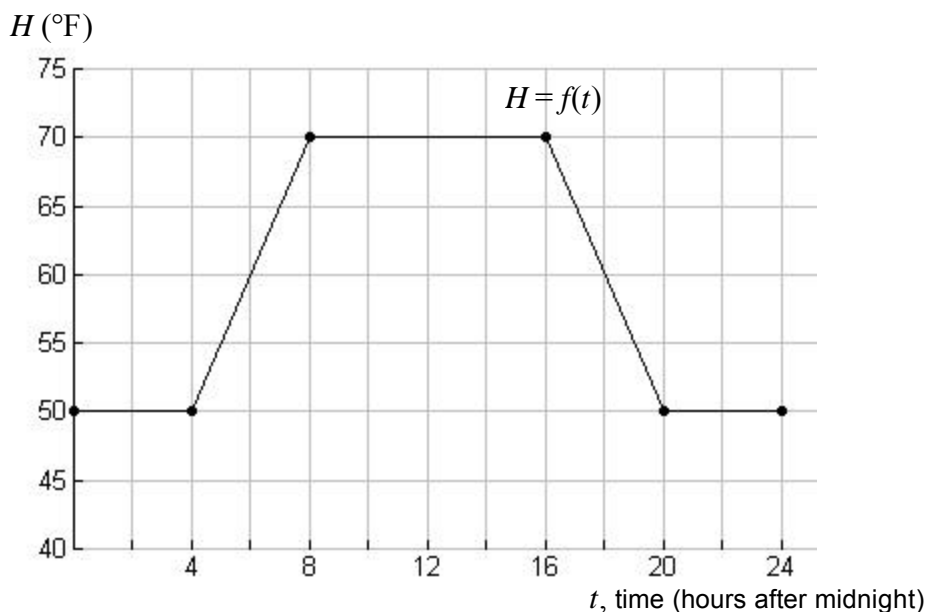


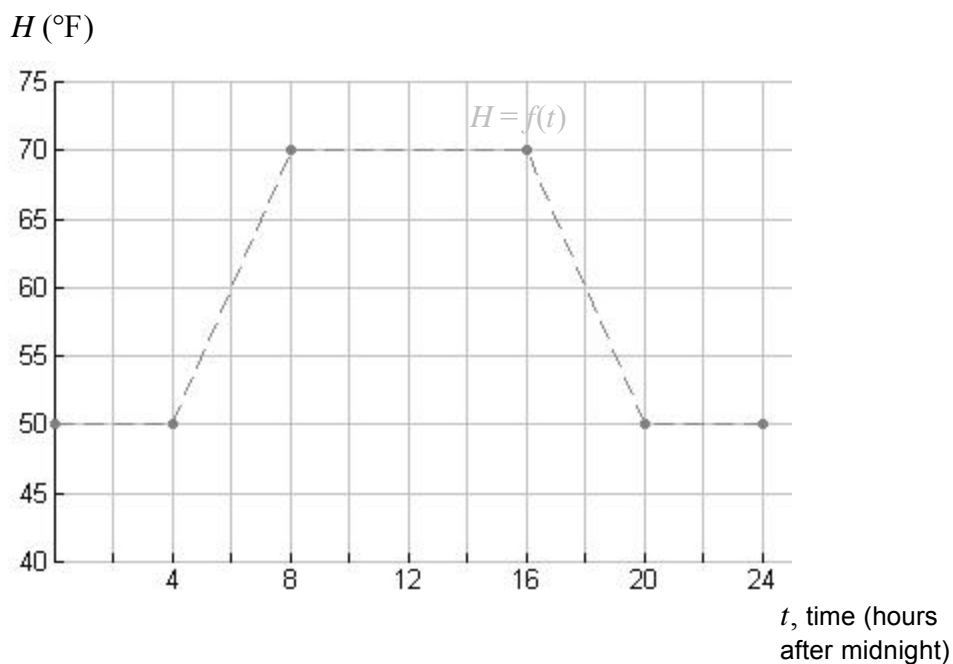
1. The heating schedule of a building, given by  $H = f(t)$  is given below, where  $t$  is hours after midnight and  $H$  is the temperature in °F. Graph the function  $H = f(t) - 2$  on the set of axes below.

$t$	$f(t)$
0	50
2	50
4	50
6	60
8	70
10	70
12	70
14	70
16	70
18	60
20	50
22	50
24	50



2. Now graph the function  $H = f(t - 2)$  on the set of axes below. (The graph of  $H = f(t)$  is lightly sketched below to compare). Complete the table.

$t$	$t - 2$	$f(t - 2)$
2		
4		
6		
8		
10		
12		
14		
16		
18		
20		
22		
24		
26		



3. At 8 am, is the building warmer under the  $f(t)$  schedule, the  $f(t - 2)$  schedule, or the  $f(t) - 2$  schedule? What is the temperature under that schedule?
4. Which schedule saves the company most on heating costs, assuming that the cost of heating depends on the thermostat setting?