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1  /* hw 1.5 Write a program that estimates the temperature in a freezer (in °C)
   given the
2  elapsed time (hours) since a power failure. Assume this temperature (T) is
3  given by
4   $T = 4t^2/(t+2) - 20$ 
5
6  where t is the time since the power failure. Your program should prompt the
7  user to enter how long it has been since the start of the power failure in
   whole
8  hours and minutes. Note that you will need to convert the elapsed time into
9  hours. For example, if the user entered 2 30 (2 hours 30 minutes), you would
10 need to convert this to 2.5 hours.
11 */
12
13 #include<stdio.h>
14 #include<math.h>
15
16 int main()
17 {
18     int hrs;
19     double i,mins,t,f,T;
20
21     printf("Enter the temperature in \370C just before power failure\n");
   /* /370 is degree symbol */
22     scanf("%lf",&i);
23
24     printf("Enter the value of hours and minutes respectively since the
   power failure\n");
25     scanf("%d %lf",&hrs,&mins);
26
27     t=hrs+mins/60.00;          /* example 2 hrs 20 min = 2+ 20/60=2.3 hrs */
28     T= (4*pow(t,2)/(t+2)) -20; /* temperature as a function of elapsed time
   t hrs */
29     f= i-T;                    /* final temperature */
30
31     printf("The temperature of the freezer after %d hrs %.2f mins is %.2f
   \370C \n\n",hrs,mins,f);
32
33
34     return 0;
35 }
36

```