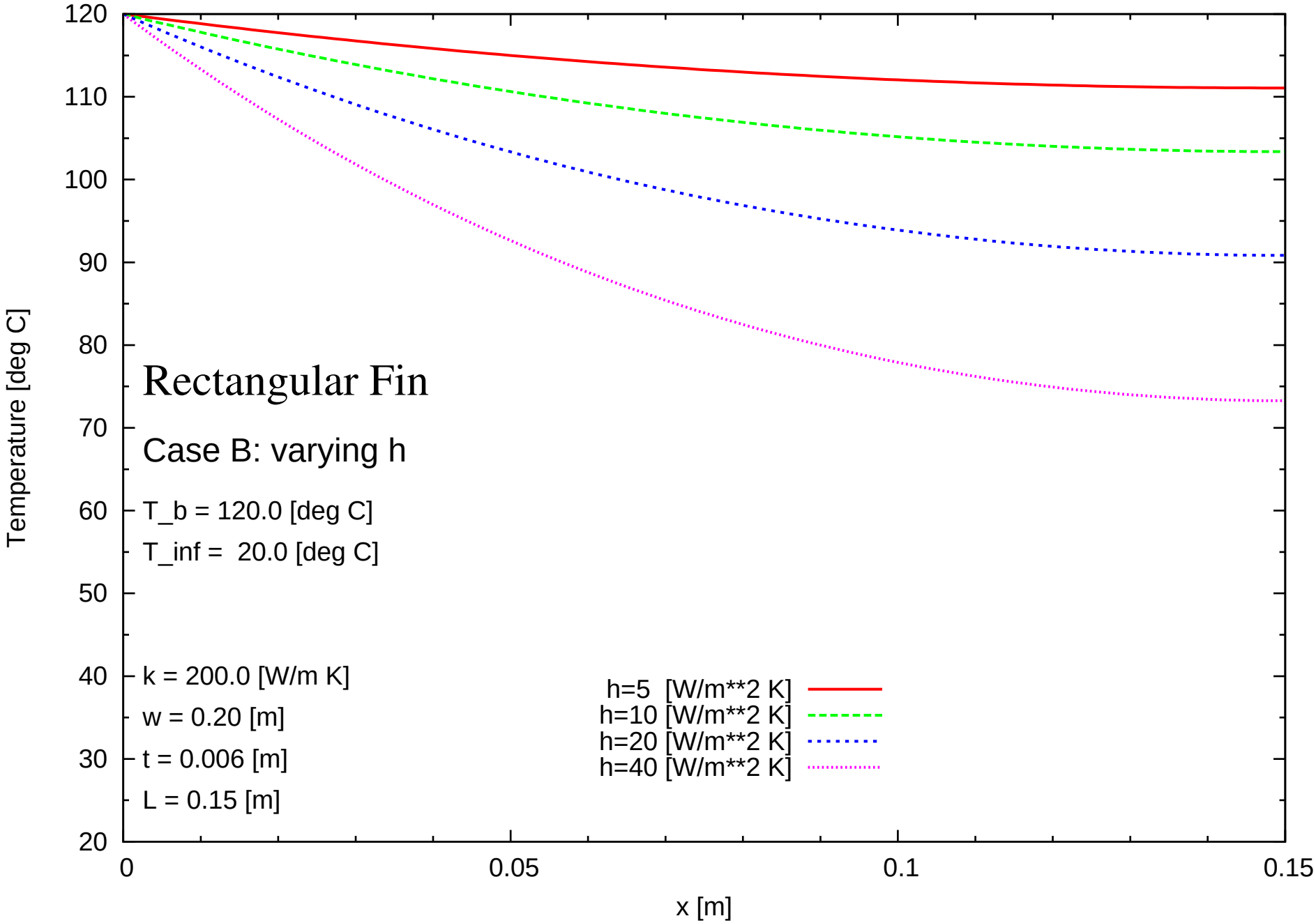
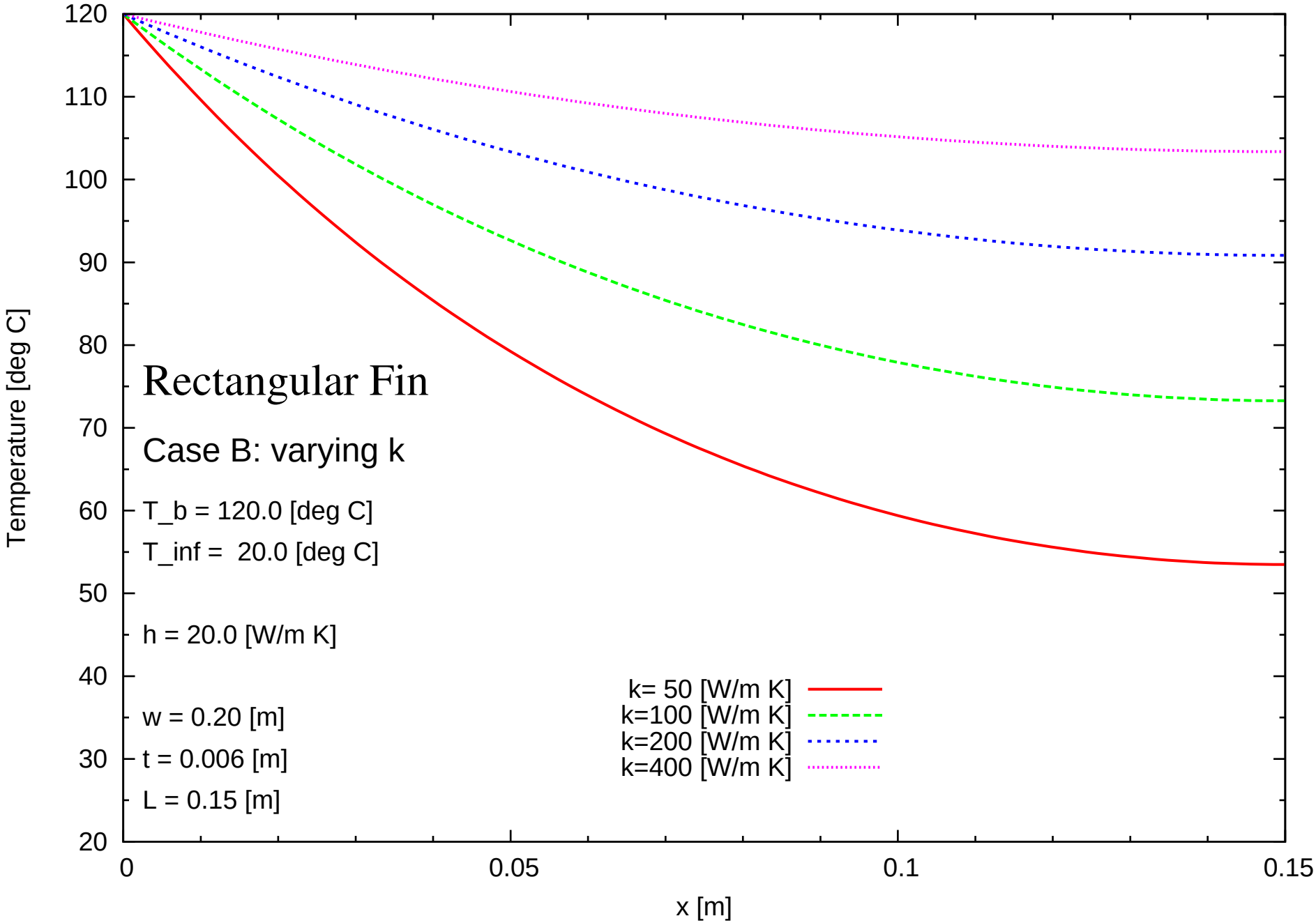
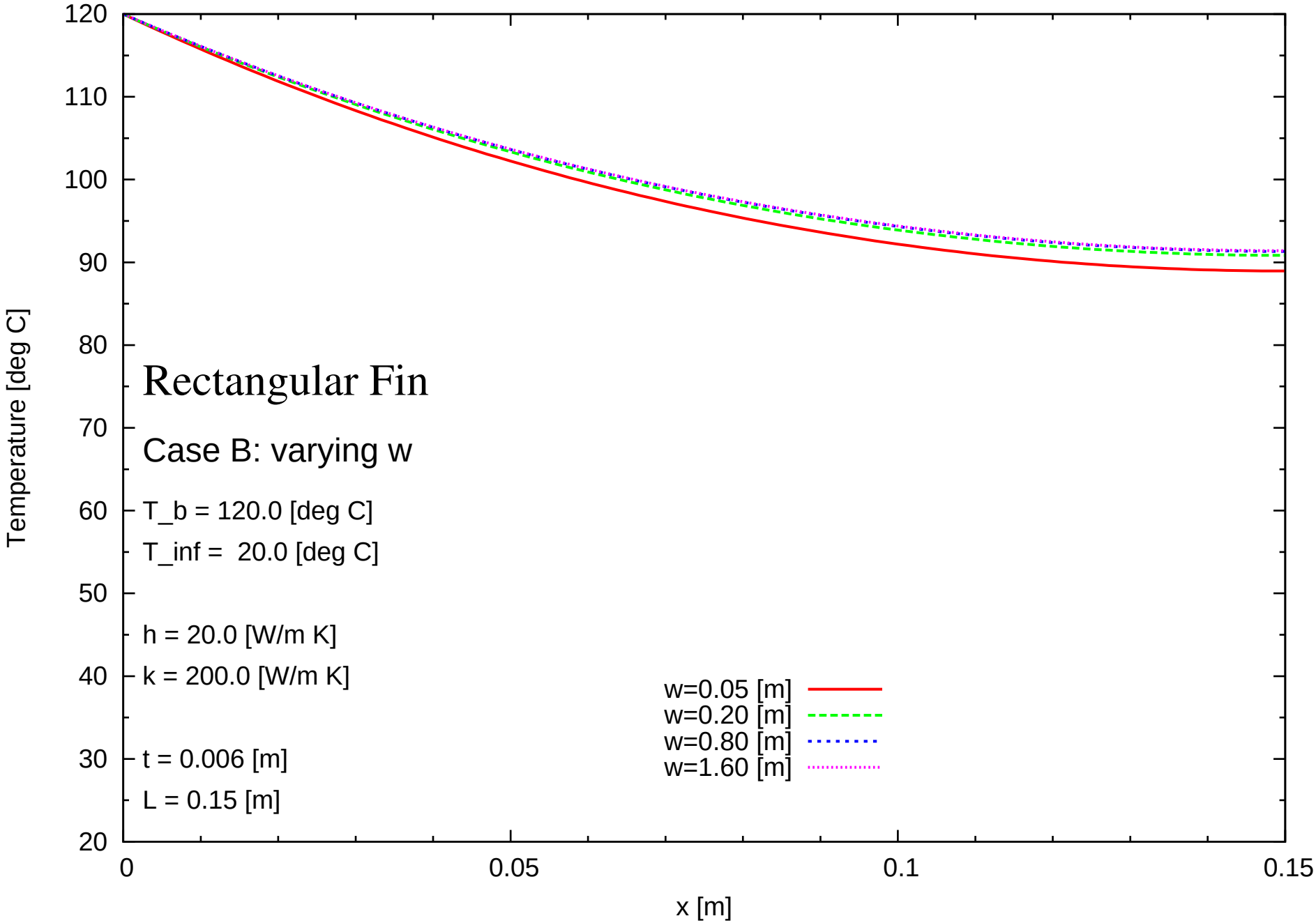
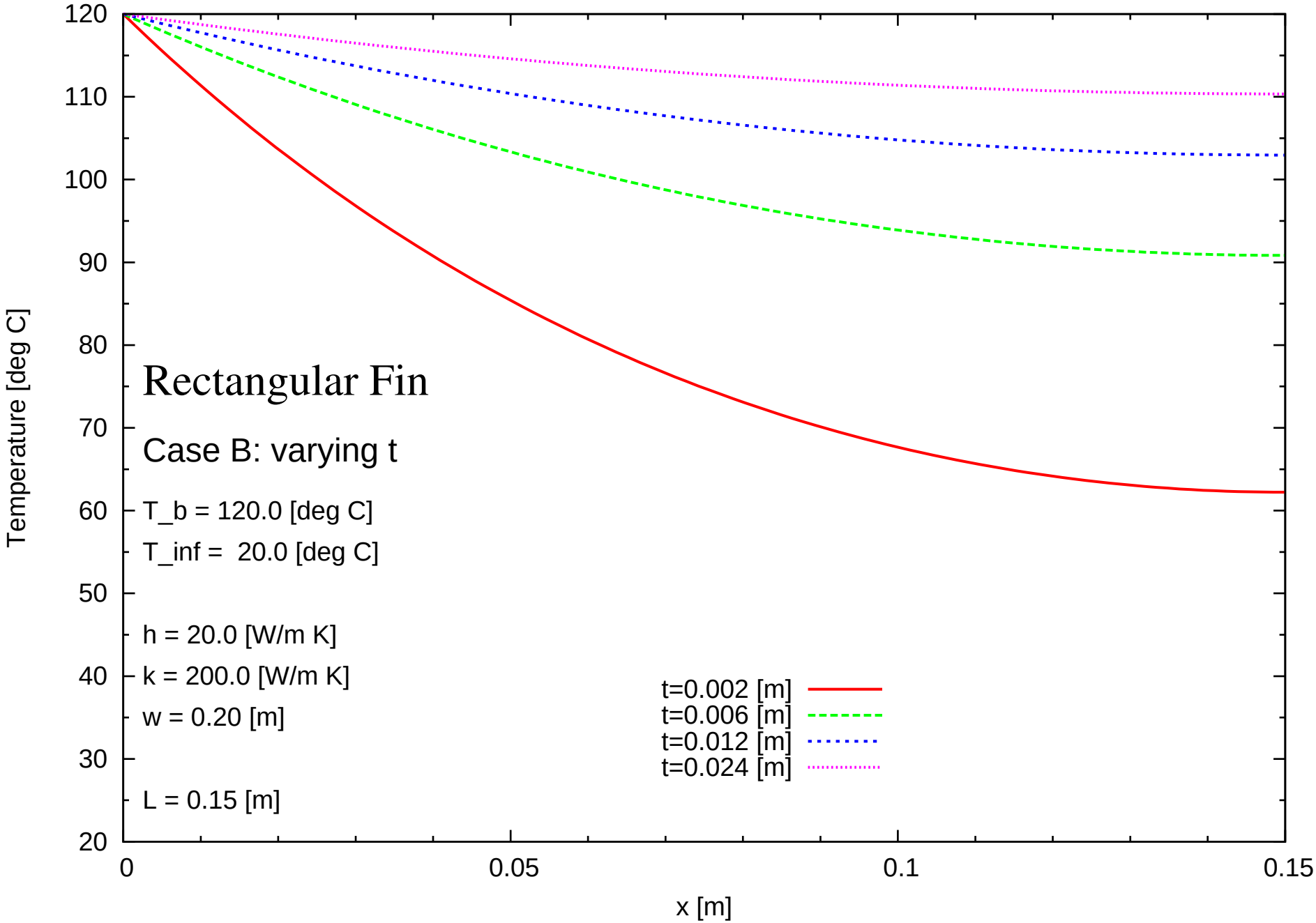

Rectangular Fin
Case B: varying h
T_b = 120.0 [deg C]
T_inf = 20.0 [deg C]
k = 200.0 [W/m K]
w = 0.20 [m]
t = 0.006 [m]
L = 0.15 [m]
h=5 [W/m**2 K]
h=10 [W/m**2 K]
h=20 [W/m**2 K]
h=40 [W/m**2 K]
Temperature [deg C]
x [m]
120
110
100
90
80
70
60
50
40
30
20
0
0.05
0.1
0.15


Rectangular Fin
Case B: varying k
T_b = 120.0 [deg C]
T_inf = 20.0 [deg C]
h = 20.0 [W/m K]
w = 0.20 [m]
t = 0.006 [m]
L = 0.15 [m]
k= 50 [W/m K]
k=100 [W/m K]
k=200 [W/m K]
k=400 [W/m K]
Temperature [deg C]
x [m]
120
110
100
90
80
70
60
50
40
30
20
0
0.05
0.1
0.15


Rectangular Fin
Case B: varying w
T_b = 120.0 [deg C]
T_inf = 20.0 [deg C]
h = 20.0 [W/m K]
k = 200.0 [W/m K]
t = 0.006 [m]
L = 0.15 [m]
w=0.05 [m]
w=0.20 [m]
w=0.80 [m]
w=1.60 [m]
Temperature [deg C]
x [m]
120
110
100
90
80
70
60
50
40
30
20
0
0.05
0.1
0.15


Rectangular Fin
Case B: varying t
T_b = 120.0 [deg C]
T_inf = 20.0 [deg C]
h = 20.0 [W/m K]
k = 200.0 [W/m K]
w = 0.20 [m]
L = 0.15 [m]
t=0.002 [m]
t=0.006 [m]
t=0.012 [m]
t=0.024 [m]
Temperature [deg C]
x [m]
120
110
100
90
80
70
60
50
40
30
20
0
0.05
0.1
0.15