

This assignment looks long, but many of the questions are quite fast.

Section 14.1 #7

Section 14.1 #17 (Model either yourself or someone you know well.)

Section 14.1 #32

Section 14.1 #33

Section 14.1 #34

Section 14.1 #35

Section 14.1 #45

Section 14.1 #61–66

Finally, how a person perceives the temperature of the air around them is influenced not just by the air's actual temperature but also by the humidity (because humidity affects the person's ability to dissipate heat through perspiration). The table below shows, for various temperatures T (in $^{\circ}$ Fahrenheit) and humidities H (in %), the perceived temperature P (in $^{\circ}$ F).

Sketch a contour plot of P as a function of T and H , on the relevant part of the T - H -plane. Your P -contours should be spaced 10° F apart, from $P = 80$ to $P = 140$.

	$H = 20$	30	40	50	60	70
$T = 80$	77	78	79	81	82	83
85	82	84	86	88	90	93
90	87	90	93	96	100	106
95	93	96	101	107	114	124
100	99	104	110	120	132	144