	Sai Parthish Mandumula
111	Stid:- 1002022847.
	Problems from chapter 4.
_~	troblème from chapter
	Control of the Contro
4.17	Standard Normal random variable Z, Bo
	(a) P(Z>0.99)
3-2	= 1-P1210:99)
	= 1-P1220,99) = 1-0.8389 from Standard normal random Variable.
	normal value
	= <u>b.1611</u> table
_~	11 D/7, 2,991
-	(b) P(ZL-0.99) = 0.1611 (from the table)
->-	= 0.1611 (4.10)
-	(c) P(Z20.99)
	= 0.8399
	(d) P(121>0.99)
	=) P(ZL-0.99)+P(Z70.99)
	=) P(ZZ-8.99) / (Zz-8.99) / (Z
<u></u>	
	<u>~ 0.32212</u>
	(e) PLZ < 10.0)
-	= 1.00 ! from the Blandard
	(e) P[2(10.0) = 1.00 : from the Blandard normal table.
	(f) P(Z>10.00)
4	5 0.00
4	
7	99
	779
1-1	

ahu	rucha of dei Atroff is 2 Sai Parthish Mandunula (FP3 (50000) 1002022847.
, and	(F P 3 C 5 0 C 0 0 1 100 202 2 8 4 7.
9	I ensite a half to a of the Zila Den than
10	) with poor sability o. 9. Variable Z 18 len than.
	→ P(ZL1.28)
0	planding by myos 10281 x worth primus A-9)
	- random sawable -
al a	I'm who of the palmation of to acid of
	(000 (000 - 010) 2 2)
4.21	The aug height of professional bastetball is = 6 feet 7 inches = 79"
	15 = 6 feet 7 inches! = 79"
	Standard deviation = 3.89 inches
	. 88FO.02
	@ percent of professional basket ball player
9	ace taller than 7 beet are = 84'11 A'
	P(X>84) = 1-((84-79)/3.89)
	700 = 100x ((0)85)) 1 × 19
(9)	101- 400 800 600 10 From x'-1 at
	= 0.0994-0008-1
1 10 10 10	
	Bill wow loverite along is within the taller
	B) If your favorite player is within the taller 20 % of all players then height is P(X>h):0.02
	P(X>h) = 0.01
	1-2((h-79)/3.84)) = 0.2
	2((h-79/3.84))=0.8
	2(0.85) : 0.1 (from the table)
	-) ((h-79)/3.84) = 0.85
	h-49=3.264
	h= 3-264+29
	h = 82.264
	h = 6'10" 6 feet windres.

dumeno (1 deidt of in Sai Parthish Mandennula 1002022847. 1002023843. 4.22 Refer to the country Example 4.11:

we have  $\mu = 900$  doins and  $\sigma > 200$  coins @-Assuming that x is a normal distribution random raniable Portion of the population for bottle milk is P(2(640-900)/200) and to dead P(Z4-130/1200) Nied pus and 100 P(ZK-13-110) and + 1997 2 - 21 62000; P(24-1:3) 2:00 broken) = 0.0968. (a) percent of professional briver bruss play (B) incomes qualifies a household to get free agandwich among 5%. (1) P(72(1=900)1200) = 0.05 (i-900)1200 21.64 (from z'+able) 1-900= -328 1 = 5+2 coiny 10 0 (5) If your found player is veither the fallent 1-21(6-19) 3.841) :0.2 be 610" 6 feet winches