

Sersion 14: Additional Exercise Problem Statement 1: Here X=D & 21=d and f(x) = 20e 20 (x-12.5) 9 Non 2 > 12.5. * Propelier & Scropped: (22015 mont 12.628.0- 25) 9 0 $p(12.50x = 12.6) = \int_{12.5} f(x)dx$ $= \int_{-e}^{-20} (x-12.5) dx$ 2021 865 (FE.155) 9 = volum dramelei vis of 12 mm. ("-20 (2-12.5))

= 5"+(2)d2 = 5"-e" (2-12.5) 2988510-535010-(184+9-0 = ... of pros = - 4.6) commodite found exactly from 15 should bill ~ (str) = 3) + 2) = 2 2000000 (1P.2- 25) 9 aved wood 20, 1 = 5 (5 × 5)9 tool dans 5 autou Ellaria (6) I byen løkatti graph tin Ruden texs defined over einlevely 12.6 6 0. It of £ 12.5. Sheall the probability accumulated

Problem Holenent 2; (a) P(2 > 1.26) 2=1-p(2≤1.26) 1-60 box 10 x 00x =1-0.89616=0.10384. one is a surgary @ P (2 C -0.86), (toon 2 lälle) = 0.19490 (3 P(Z>-1.37) = P (Z < 1.37) = 0.91465. (9 P(-1.256 26037) = P(2<0.37)-P(2<-1.25) = 0.64431-0.10565=0.53866 Q P(2 = - 4.6) cannot be tond exactly foon the Slaudard little From lasee P (25-3.99)0.00003 So that (25-4.6) 424 (b). Find (ii) value z such that P(Z>z) =0.05 P(262)= 0.95 than feartash Z=1.65. evalue our being to cost and for E Frid the value of 2 Such that P(-2 < Z < Z) = ,0.99 0.005 0.005/

Irollen statement 3: $P(xz_{13}) = P\left(\frac{(x-10)}{2} \ge \frac{(13-10)}{2}\right) = P(zz_{1.5})$ = 0.06681 0 P(x >13)= P(2 >1.5)=1-P(251.5) 2000 = 1-0.93319 = 0.06681 Distribution of 22 x-hosso O what is the probability Italia current measurement in shire & ((ma) P(9 CX < 11) = P((9-10)/2 < (X-10)/2 < (11-10) = p (-0.5 (2 (0.5)= p(2 (0.5)-p(2 = 0.69146-0.30 854=0.38292 Delermine the current measurement which has a probibition P(x cx)=P((x-10)/2 e(1-10)/2). Q 0.93. =P(26(x-10)/2) 13/160 80760 E 3. 9 3. P(Z < g. 05) = 0.97982 21 22 (2.05) +10 = 14.1 mA. 2 = 2-10 = 2.05

Problem street 4/ let + devoté lie shaft diameter in inches. P(0.2485 < x < 0.2515) $= P \left[\begin{array}{c} 0.2485 \\ \hline 0.0005 \end{array} \right] = P \left[\begin{array}{c} 0.2508 \\ \hline 0.0005 \end{array} \right] = P \left[\begin{array}{c} 0.2515 \\ \hline 0.0005 \end{array} \right]$ 8 = (-4.622C1.4)-5 graduated = P(Z < 1.4) - P(Z < -4.6) es((01-11)) S el(01=0) 9 9 1924 - 10,0000 ptilled a sol land find (c/(01-2)) 2 c (2-10)/2) (s)(or-1) se 0.2486 0.2508 0251Ex I is less than 0-0015 then value will be 0.