Welcome back! Last time: Central Limit Theorem ... Proportions (Binomial) 1) SN 230 is sample size 1) SN 2 10% of paper leation size 2) of population is mormal 1C(-p) 2 10 sample proportions is Normally Dist confidence inferval of confidence 0% is an inferval that contains the population parameter w/ "c% of confidence" The population parameter lies in the interval 195% confidence informal avg (comple) is 84.6 7865 -you know that std. dev. of weights in beavers is 16-8 lbs Create a 95% CI. for the population and weight $Z_{b} = \frac{b-84.6}{16.8(150)} = 1.96 \implies b = 88885$ "We are 95% confident that any weightof beavers is between 80.35 and 88.35 points. Dry company produces tablets al mass normally dist. 0= 0.038 mg A random sample of 10 tabs w(avg mass is 4.87 mg. Foul 9506 CI for any mass of tablets? ve are 95% confident that the avg mass of a tablet is between 4.85 and 4.89 mg (b) 99% CI (c) What happens to C.I. size as Colo 1/2 Given std-dev. of as approximate fl win a margin of error who colo an filance? Way - minimal sample 1 $\frac{0}{1000}$ $\frac{1}{3}$ \frac => 2.3 = 0.3 $= 25/(2-35)(1-365)^2$ N & 112 Beavers return. sample mean will lifter by no more than 5 lbs Want 95% contilaux that (0 = (6.8 Ms) from population mean what sample size?? 2 -1.96 1.56 \\ \frac{16.8}{\sqrt{10}} $= \frac{1}{2} = \pm 1.96 \left(\frac{16.8}{50} \right)$ 1:26 (16.8) / S = 12= At beavers.