İST 135 Temel İst. I Final

1. a). 5

boy	140-150	150-160	160-170	170-180	180-190
f	10	20	35	25	10
der Ar	10	30	65	90	100
der cde	100	90	70	35	10

5 b) $<160 \rightarrow 30$ kişi 7,170 cm 35 kişi

5 d) $Mod = 160 + \frac{35-20}{(35-25)+(35-25)} \cdot 10 = 166$ cm

5 e) $Medyan = 160 + \frac{50-30}{35} \cdot 10 = 165.7$ cm

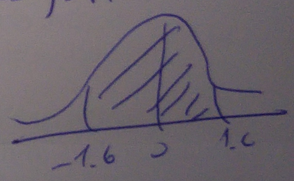
5 f) $\bar{x} = \frac{\Sigma f_i m_i}{\Sigma f_i} = \frac{16550}{100} = 165.5$ cm

2 ISP $DK_A = \frac{6,91}{34.17} \cdot 100 = \%20.2$ $DK_B = \frac{8.63}{27.15} \cdot 100 = \%31.7$

3. $X \sim N(500, 10^2)$

10P a) $P(484 < x < 516) = P\left(\frac{484-500}{10} < Z < \frac{516-500}{10}\right) = P(-1.6 < Z < 1.6)$

$1 - 2 \times P(Z > 1.6) = 1 - 2 \times 0.0548 = 0.8904$



10P b) $P(500 < x < 512) = P\left(0 < Z < \frac{512-500}{10}\right)$

$= P(0 < Z < 1,2) = 0,5 - P(Z > 1.2)$

$= 0,5 - 0.1151 = 0,3849$

4 15P

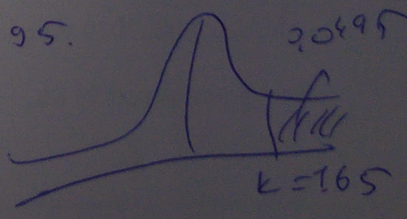
	A	B	C	D	E
Z	0,625	0.5	1	0,625	0,417
F	56.25	55	60	56.25	54.16

c testte en başarılı test.

5 15P $P = \frac{495}{1000} = 0,0495$ $P\left(Z > \underbrace{\frac{x-60}{10}}_{k}\right) = 0.0495$

$X \sim N(60, 10^2)$ $k = \frac{x-60}{10} = 1.65$ $x = 76.5$

$n = 10.000$



6 10P. $B = A(1+r)^n = 200.000(1+0.05)^5$

$= 255256$