HOMEWORK #5

Marked out of (40)

1. a) E(X) = -5 × 0.579 + 5 × 0.347 + 10 × 0.069 + 60 × 0.05 = -0.17 (2)24 MAXANIK-A-A-N-F-NEAON75-ACNE-A-A)A+NEA-A)A/A/A Evander Jeran Lawrende (2) ad (x) = V(-5+0.17)2.0.579 + (5+0.17)2.0.347 + (10+0.17)2.0.069 + (60+0.17)2.0.005 = 6.930 P(positive return) = 0.347 + 0.069 + 0.005 = 0.421 (2) (2) solution and solut sd (X) = Mannanzanzanzanza = Th = 0.693 (2)100 Normal distribution, Central Limit Theorem (2) z = 0 + 0.17 = 0.25 ü) VANS 0.693 P(X>0) = MARIERMANATE 1-0.599 = 0.401 (3)c) 5000: 1000 : 10000: $\begin{array}{c} -0.17 \\ -0.17 \\ \vdots \\ E(\bar{X}) = W20 \\ (2) \\ E(\bar{X}) = -2550 \\ (2) \\ E(\bar{X}) = -0.17 \\ -0.$ (1) $sd(\tilde{x}) = \frac{92}{12}$ (2) $sd(\tilde{x}) = \frac{2}{12}$ (2) $sd(\tilde{x}) = \frac{3}{12}$ (2) $sd(\tilde{x}) = \frac{3}{12}$ (2) $sd(\tilde{x}) = \frac{3}{12}$ (2) $sd(\tilde{x}) = \frac{3}{12}$ (2) $sd(\tilde{x}) = \frac{3}{12}$ ii) z = 0/2/20 0+0.17 z = 10/2/3/20 0+0.17 z= 0/2/2000 0+0.17 ANA 0-219 212 0-098 13673.00 0.069 $= \alpha \beta n = 0.78 = \alpha Bq = 1.73$ = 185 = 2.46 P(X70) =1/101507 P(X>0)=1/101652 P(X>0)=(1-10-202 torzan =12,433 =0342 = 1 - 0.782 (2) = 1 - 0.958 (2) = 1-0.993 (2) = 0.007 = 0.211 = 0.042

Control (1997 Contro 100 100 1000 SOOD 1000 1000 1000 # of bets

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d) 0.5-* * Construction of the second of

NING - State Distance weat - The Co Plot shows that as you increase the # of bets the prob of making a positive Freturn decreases.

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新来了到了这些话,这些**对这些现象的**,就是

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Stat 13 HW_5_2

- (a) se(x1-x2) = square root($S_1^2/n_1 + S_2^2/n_2$) = square root(1.82²/53+1.53²/60) = 0.3186
- (b) The 2-standard-error interval is 7.90-4.30±2×0.3186=[2.96, 4.24]
- (c) As this interval is well away from zero, sexual content seems to make a difference. The true mean number of correctly remembered brands under these conditions is likely to be greater when sexual content is present by somewhere between 3.0 and 4.2 brands than when it is absent. There is too little information for us to criticize the experiment. We would hope, however, that the complete set of students was split into two groups at random.