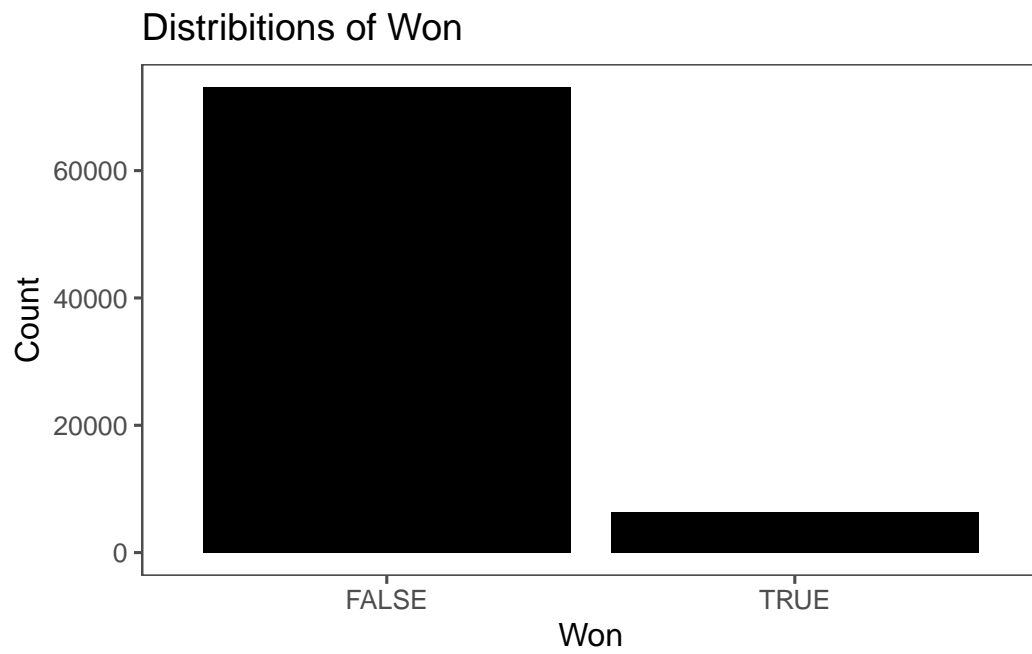
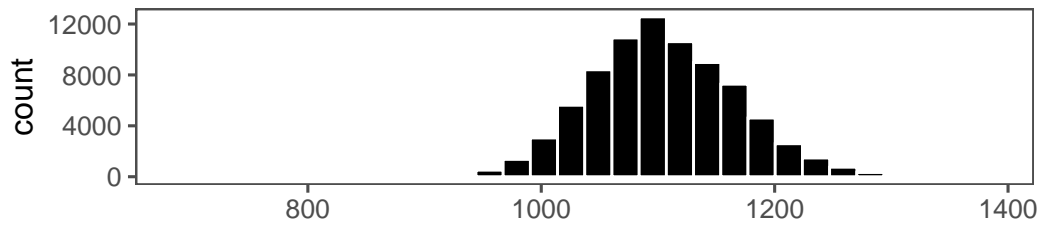


EDA

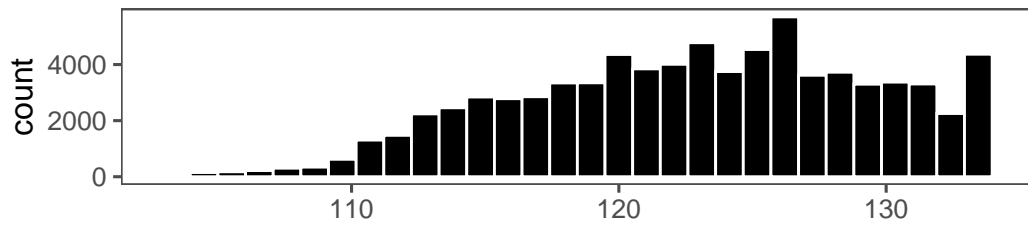


The average number of horses per race is 12.65. On average the chance odds against winning are $\frac{1-p}{p} = \frac{11.65}{1}$, so 11.65 : 1. Even though there is ≈ 0.079 chance of winning, with 806 wins in our 10,000 training data we satisfy the one in ten rule.

Declared Weight of Horse and Jockey in lbs

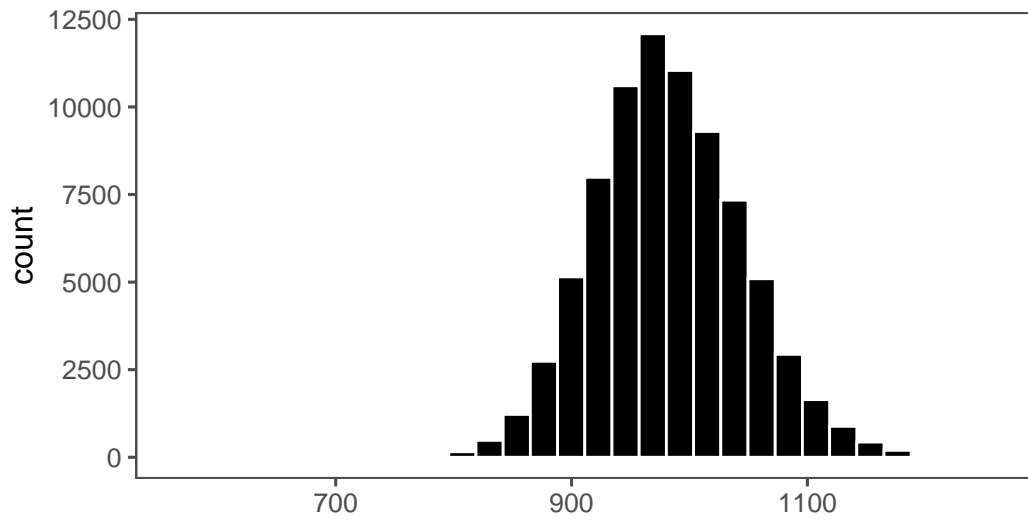


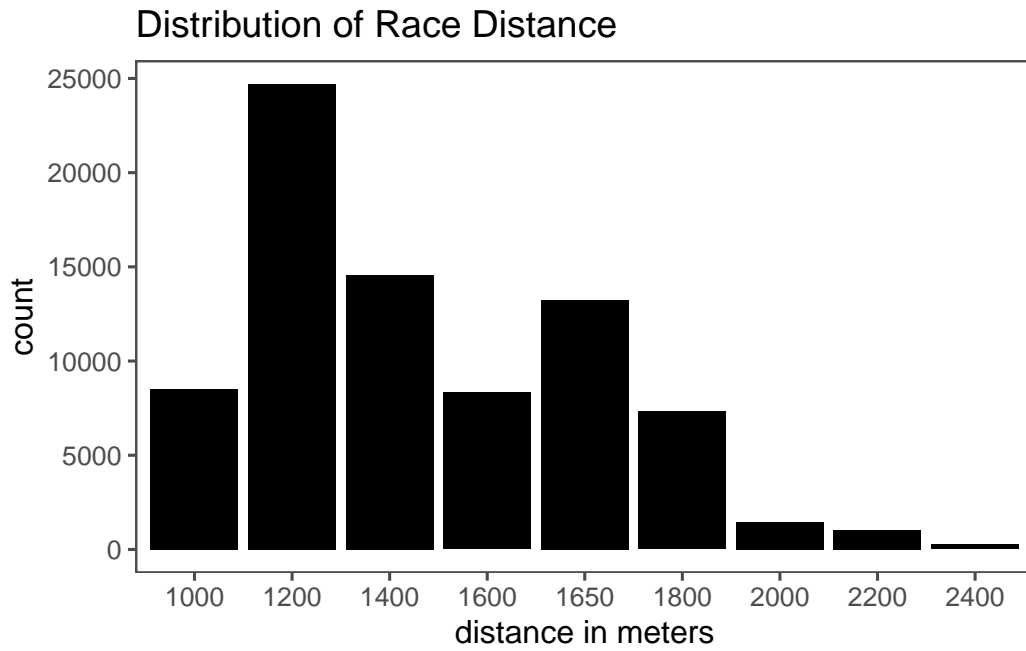
Actual Weight Carried by Horse in lbs



Weight of Horse

Found by subtracting declared_weight by actual_weight

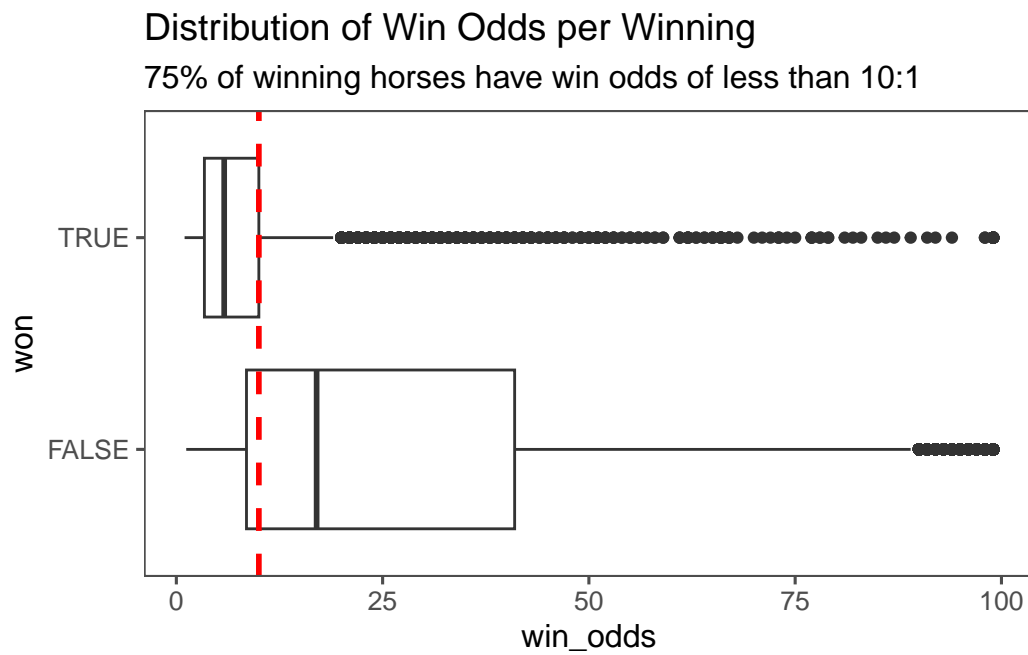
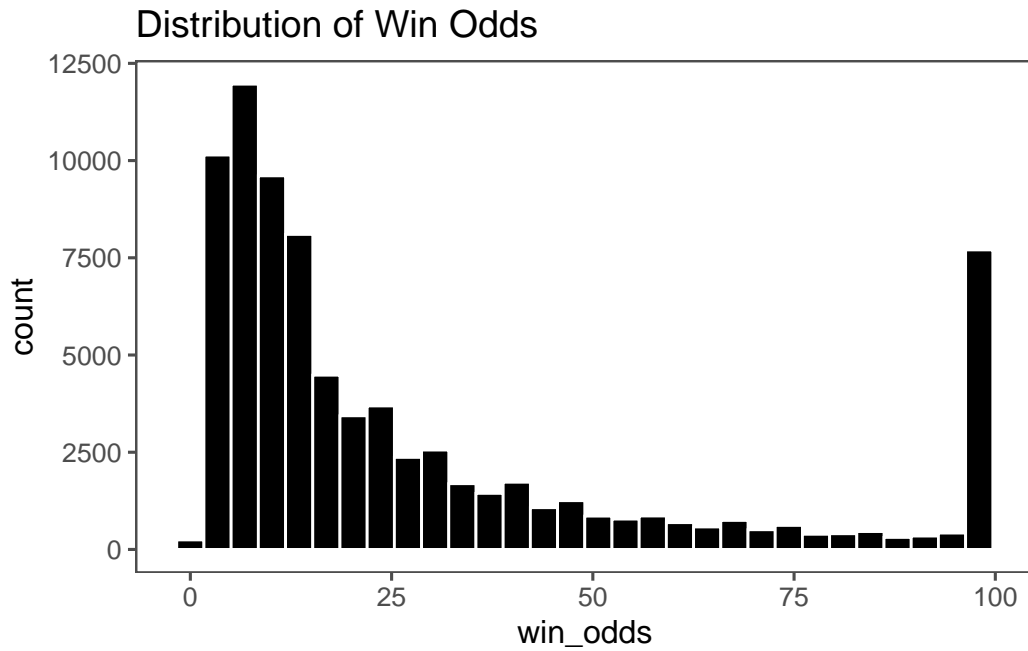




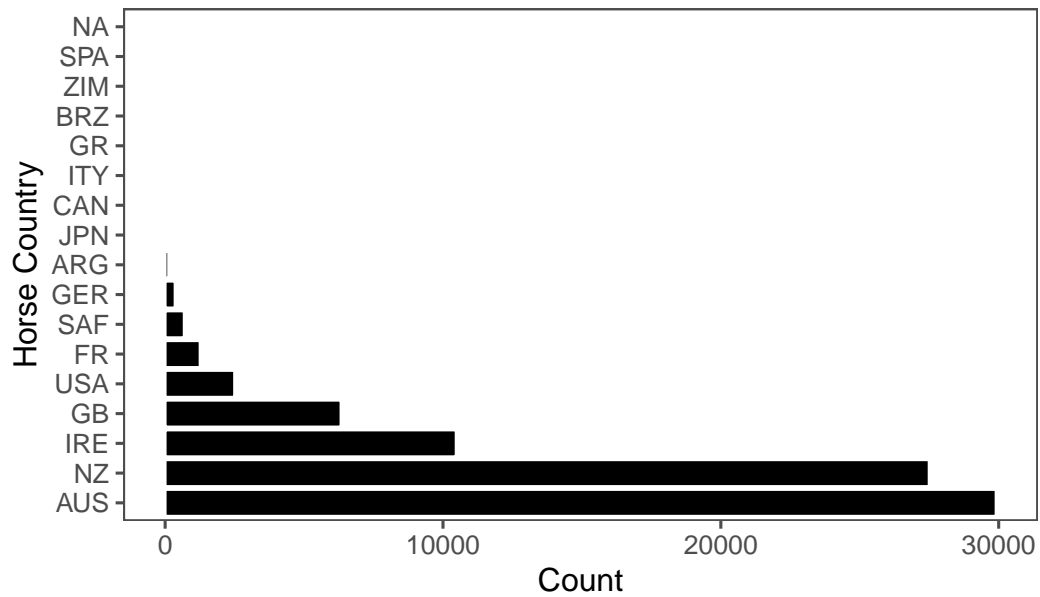
Percentiles For Horse Ratings

10%	15%	20%	50%	80%	85%	90%
52	58	60	60	60	65	72

About 60% of horses have a rating of 60

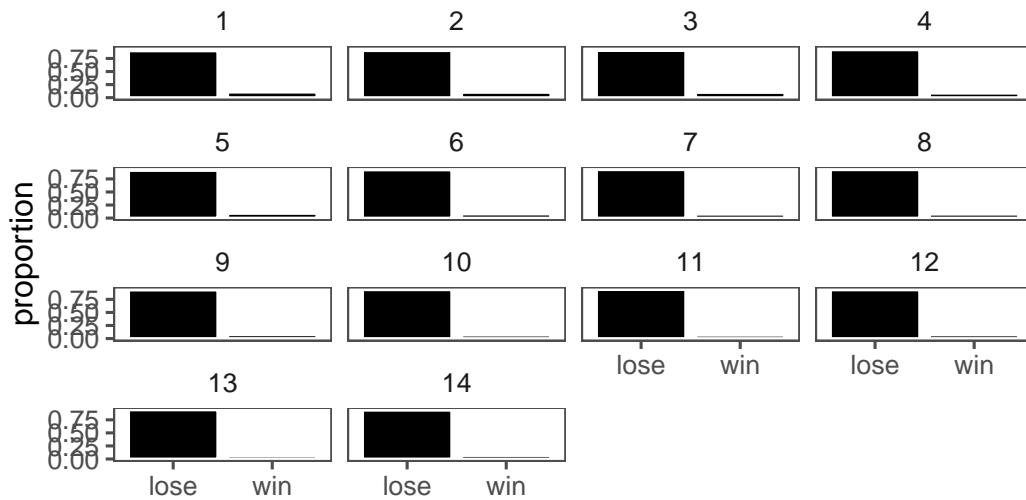


Distribution of Horses by Country



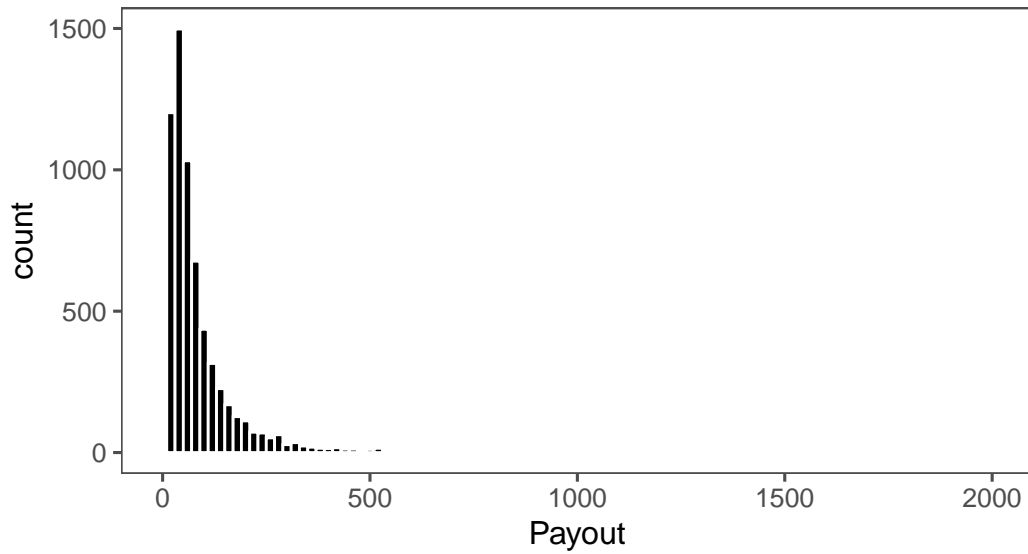
Proportion of Wins and Losses per Draw

winning and starting position are independent



Distribution of First Place Dividend

The maximum payout was 2687.50



As Win Odds increase by 1, payout increases by 10

Per a SLR model that excludes win odds greater than 98

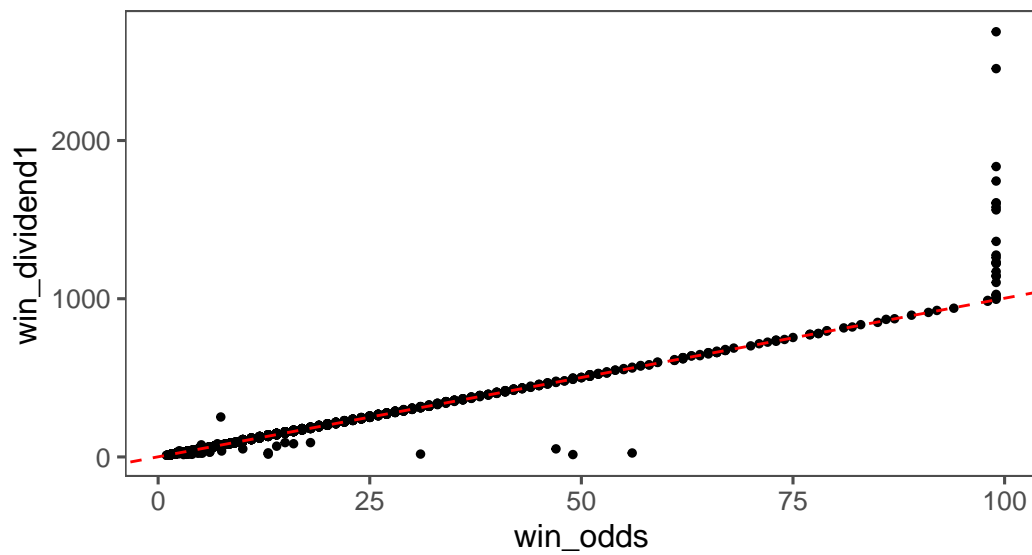


Table 1: Number of Levels per Character Variable

Variable	Number of Levels
race_id	6348
horse_id	4405
horse_gear	822
jockey_id	186
trainer_id	176
horse_ratings	31
horse_country	17
draw	15
position_sec4	15
position_sec5	15
position_sec6	15
place_combination3	15
horse_no	14
result	14
position_sec1	14
position_sec2	14
position_sec3	14
place_combination1	14
place_combination2	14
race_no	11
place_combination4	11
horse_type	10
going	10
race_class	10
distance	9
config	6
venue	2
surface	2