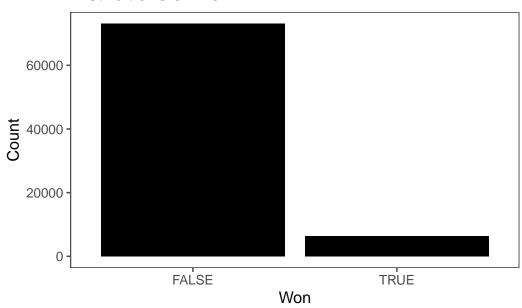
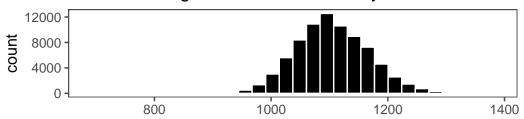
EDA

Distribitions of Won

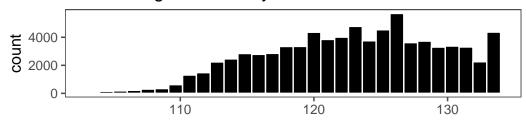


The average number of horses per race is 12.65. On average the chance odds against winning are $\frac{1-p}{p}=\frac{11.65}{1}$, so 11.65: 1. Even though there is ≈ 0.079 chance of winning, with 806 wins in our 10,000 training data we still satisfy the one in ten rule.

Declared Weight of Horse and Jockey in lbs

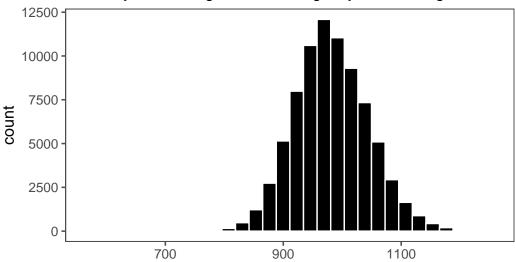


Actual Weight Carried by Horse in lbs

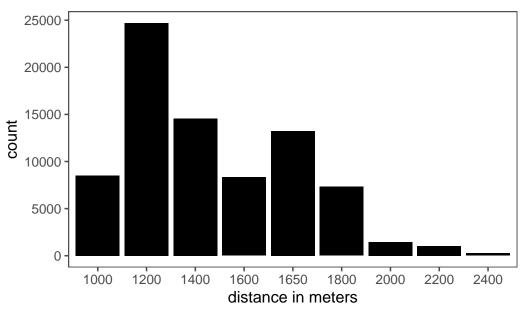


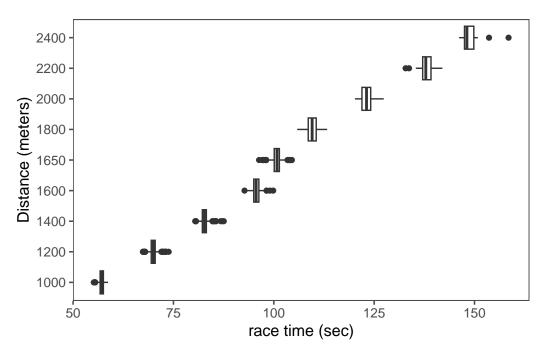
Weight of Horse

Found by subtracting declared_weight by actual_weight



Distribution of Race Distance





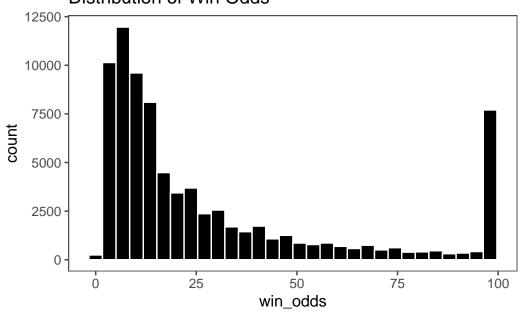
Percentiles For Horse Ratings

10% 15% 20% 50% 80% 85% 90%

52 58 60 60 60 65 72

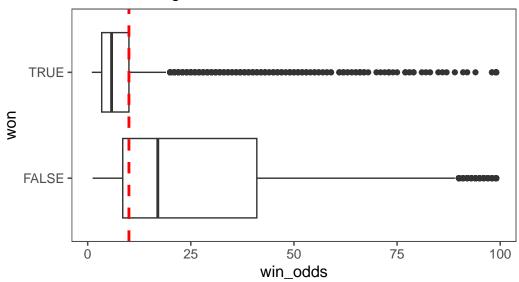
About 60% of horses have a rating of 60

Distribution of Win Odds

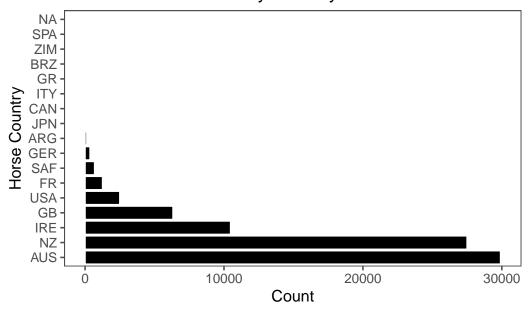


Distribution of Win Odds per Winning

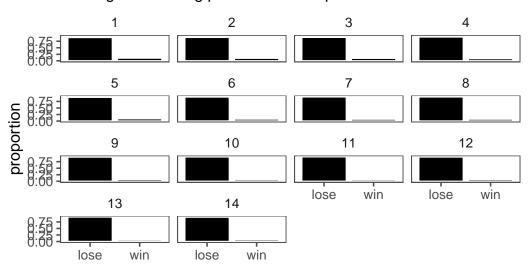
75% of winning horses have win odds of less than 10:1



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

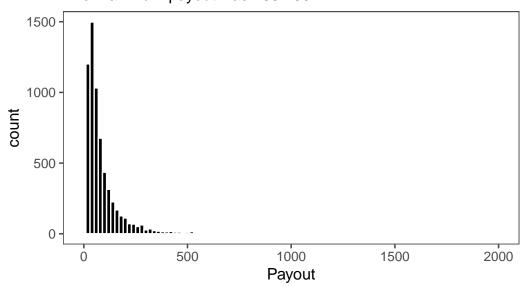


Table 1: Number of Levels per Character Variable

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