

# UFC RESEARCH QUESTION 1

Due 8th December, 2024

```
ufc <- read.csv("ufc-master.csv")

# View the data
head(ufc)
```

```
# data cleaning cell
colSums(is.na(ufc))
```

RedFighter	BlueFighter
0	0
RedOdds	BlueOdds
219	219
RedExpectedValue	BlueExpectedValue
219	219
Date	Location
0	0
Country	Winner
0	0
TitleBout	WeightClass
0	0
Gender	NumberOfRounds
0	0
BlueCurrentLoseStreak	BlueCurrentWinStreak
0	0
BlueDraws	BlueAvgSigStrLanded
0	930
BlueAvgSigStrPct	BlueAvgSubAtt
765	832
BlueAvgTDLanded	BlueAvgTDPct
833	842

BlueLongestWinStreak	0	BlueLosses	0
BlueTotalRoundsFought	0	BlueTotalTitleBouts	0
BlueWinsByDecisionMajority	0	BlueWinsByDecisionSplit	0
BlueWinsByDecisionUnanimous	0	BlueWinsByKO	0
BlueWinsBySubmission	0	BlueWinsByTKODoctorStoppage	0
BlueWins	0	BlueStance	0
BlueHeightCms	0	BlueReachCms	0
BlueWeightLbs	0	RedCurrentLoseStreak	0
RedCurrentWinStreak	0	RedDraws	0
RedAvgSigStrLanded	455	RedAvgSigStrPct	357
RedAvgSubAtt	357	RedAvgTDLanded	357
RedAvgTDPct	367	RedLongestWinStreak	0
RedLosses	0	RedTotalRoundsFought	0
RedTotalTitleBouts	0	RedWinsByDecisionMajority	0
RedWinsByDecisionSplit	0	RedWinsByDecisionUnanimous	0
RedWinsByKO	0	RedWinsBySubmission	0
RedWinsByTKODoctorStoppage	0	RedWins	0
RedStance	0	RedHeightCms	0
RedReachCms	0	RedWeightLbs	0
RedAge	0	BlueAge	0
LoseStreakDif	0	WinStreakDif	0
LongestWinStreakDif		WinDif	

	0	0
LossDif		TotalRoundDif
	0	0
TotalTitleBoutDif		KODif
	0	0
SubDif		HeightDif
	0	0
ReachDif		AgeDif
	0	0
SigStrDif		AvgSubAttDif
	0	0
AvgTDDif		EmptyArena
	0	1436
BMatchWCRank		RMatchWCRank
	5289	4716
RWFlyweightRank		RWFeatherweightRank
	6382	6469
RWStrawweightRank		RWBantamweightRank
	6334	6324
RHeavyweightRank		RLightHeavyweightRank
	6295	6296
RMiddleweightRank		RWelterweightRank
	6296	6290
RLightweightRank		RFeatherweightRank
	6295	6303
RBantamweightRank		RFlyweightRank
	6299	6292
RPFPRank		BWFlyweightRank
	6228	6406
BWFeatherweightRank		BWStrawweightRank
	6477	6380
BWBantamweightRank		BHeavyweightRank
	6371	6332
BLightHeavyweightRank		BMiddleweightRank
	6360	6341
BWelterweightRank		BLightweightRank
	6360	6359
BFeatherweightRank		BBantamweightRank
	6355	6360
BFlyweightRank		BPFPRank
	6348	6411
BetterRank		Finish
	0	0

FinishDetails	FinishRound
0	622
FinishRoundTime	TotalFightTimeSecs
0	622
RedDecOdds	BlueDecOdds
1077	1107
RSubOdds	BSubOdds
1326	1350
RKOdds	BKOdds
1324	1351

```
# removing the data which has way too many missing values
```

```
ufc = subset(ufc, select = -c(BMatchWCRank, RMatchWCRank, RWFlyweightRank,
RWFeatherweightRank, RWStrawweightRank, RWBantamweightRank,
RHeavyweightRank, RLIGHTHeavyweightRank, RMiddleweightRank,
RWelterweightRank, RLIGHTweightRank, RFeatherweightRank,
RBantamweightRank, RFlyweightRank, RPFPRank, BWFlyweightRank,
BWFeatherweightRank, BWStrawweightRank, BWBantamweightRank,
BHeavyweightRank, BLIGHTHeavyweightRank, BMiddleweightRank,
BWelterweightRank, BLIGHTweightRank, BFeatherweightRank,
BBantamweightRank, BFlyweightRank, BPFPRank))
```

```
library(dplyr)
```

Attaching package: 'dplyr'

The following objects are masked from 'package:stats':

```
filter, lag
```

The following objects are masked from 'package:base':

```
intersect, setdiff, setequal, union
```

```
# removing all missing value rows from the columns of interest
ufc_clean <- ufc %>%
  filter(
    !is.na(RedAvgSubAtt),
    !is.na(BlueAvgSubAtt),
```

```

!is.na(BlueReachCms),
!is.na(RedReachCms),
!is.na(BlueAvgSigStrLanded),
!is.na(RedAvgSigStrLanded),
!is.na(TotalFightTimeSecs),
!is.na(WeightClass)
)
nrow(ufc_clean)

```

[1] 4895

```

filtered_ufc_blue <- ufc_clean[c("BlueReachCms", "BlueAvgSigStrLanded",
                                "WeightClass", "BlueHeightCms",
                                "BlueCurrentWinStreak")]
colnames(filtered_ufc_blue) <- c("ReachCms", "AvgSigStrLanded", "WeightClass",
                                 "Height", "WinStreak")
filtered_ufc_red <- ufc_clean[c("RedReachCms", "RedAvgSigStrLanded",
                                 "WeightClass", "RedHeightCms", "RedCurrentWinStreak")]
colnames(filtered_ufc_red) <- c("ReachCms", "AvgSigStrLanded",
                                 "WeightClass", "Height", "WinStreak")

# appending the two data sets
ufc_q1 <- rbind(filtered_ufc_blue, filtered_ufc_red)

# exclude outlier(one observation with 0 cm reach)
ufc_q1 <- ufc_q1[ufc_q1$ReachCms > 0,]
ufc_q1 <- ufc_q1[ufc_q1$AvgSigStrLanded > 0,]

# check missing value: no missing
colSums(is.na(ufc_q1))

```

ReachCms	AvgSigStrLanded	WeightClass	Height	WinStreak
0	0	0	0	0

```

# Log-transform the variables
ufc_q1$LogAvgSigStrLanded <- log(ufc_q1$AvgSigStrLanded)
ufc_q1$LogReachCms <- log(ufc_q1$ReachCms)
model_q1 <- lm(LogAvgSigStrLanded ~ LogReachCms * WeightClass + Height + WinStreak,
                 data = ufc_q1)
summary(model_q1)

```

Call:

```
lm(formula = LogAvgSigStrLanded ~ LogReachCms * WeightClass +
   Height + WinStreak, data = ufc_q1)
```

Residuals:

	Min	1Q	Median	3Q	Max
	-4.2411	-1.0121	0.1562	0.9527	3.0385

Coefficients:

	Estimate	Std. Error	t value
(Intercept)	20.299645	5.245888	3.870
LogReachCms	-3.366757	1.035627	-3.251
WeightClassCatch Weight	-9.847861	12.912028	-0.763
WeightClassFeatherweight	16.755691	7.550510	2.219
WeightClassFlyweight	57.696594	9.120653	6.326
WeightClassHeavyweight	-13.523345	7.987021	-1.693
WeightClassLight Heavyweight	-14.172206	8.268269	-1.714
WeightClassLightweight	-0.404508	6.949375	-0.058
WeightClassMiddleweight	-5.138435	7.523066	-0.683
WeightClassWelterweight	-1.955368	6.981548	-0.280
WeightClassWomen's Bantamweight	-10.914377	11.779043	-0.927
WeightClassWomen's Featherweight	-1.750844	31.478949	-0.056
WeightClassWomen's Flyweight	-23.948120	10.169350	-2.355
WeightClassWomen's Strawweight	-42.488577	9.154564	-4.641
Height	-0.003163	0.003207	-0.986
WinStreak	0.041084	0.006774	6.065
LogReachCms:WeightClassCatch Weight	1.781285	2.487705	0.716
LogReachCms:WeightClassFeatherweight	-3.188399	1.458418	-2.186
LogReachCms:WeightClassFlyweight	-11.267528	1.772449	-6.357
LogReachCms:WeightClassHeavyweight	2.646695	1.527269	1.733
LogReachCms:WeightClassLight Heavyweight	2.794438	1.582216	1.766
LogReachCms:WeightClassLightweight	0.154980	1.341615	0.116
LogReachCms:WeightClassMiddleweight	1.050072	1.444678	0.727
LogReachCms:WeightClassWelterweight	0.474180	1.344581	0.353
LogReachCms:WeightClassWomen's Bantamweight	2.093198	2.290004	0.914
LogReachCms:WeightClassWomen's Featherweight	0.143693	6.098032	0.024
LogReachCms:WeightClassWomen's Flyweight	4.511495	1.979945	2.279
LogReachCms:WeightClassWomen's Strawweight	8.272935	1.790830	4.620
Pr(> t )			
(Intercept)	0.00011 ***		
LogReachCms	0.00115 **		
WeightClassCatch Weight	0.44567		

```

WeightClassFeatherweight          0.02650 *
WeightClassFlyweight             2.63e-10 ***
WeightClassHeavyweight           0.09046 .
WeightClassLight Heavyweight     0.08655 .
WeightClassLightweight           0.95358
WeightClassMiddleweight          0.49461
WeightClassWelterweight          0.77942
WeightClassWomen's Bantamweight   0.35416
WeightClassWomen's Featherweight  0.95565
WeightClassWomen's Flyweight      0.01855 *
WeightClassWomen's Strawweight    3.51e-06 ***
Height                           0.32408
WinStreak                         1.37e-09 ***
LogReachCms:WeightClassCatch Weight 0.47399
LogReachCms:WeightClassFeatherweight 0.02882 *
LogReachCms:WeightClassFlyweight   2.15e-10 ***
LogReachCms:WeightClassHeavyweight 0.08313 .
LogReachCms:WeightClassLight Heavyweight 0.07740 .
LogReachCms:WeightClassLightweight 0.90804
LogReachCms:WeightClassMiddleweight 0.46733
LogReachCms:WeightClassWelterweight 0.72435
LogReachCms:WeightClassWomen's Bantamweight 0.36071
LogReachCms:WeightClassWomen's Featherweight 0.98120
LogReachCms:WeightClassWomen's Flyweight   0.02271 *
LogReachCms:WeightClassWomen's Strawweight  3.89e-06 ***
---
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

Residual standard error: 1.108 on 9707 degrees of freedom  
Multiple R-squared: 0.05948, Adjusted R-squared: 0.05686  
F-statistic: 22.74 on 27 and 9707 DF, p-value: < 2.2e-16

```

# Load necessary libraries
library(car)      # For VIF

```

Loading required package: carData

Attaching package: 'car'

The following object is masked from 'package:dplyr':

```
recode

library(ggplot2)      # For residual plots

# 1. Check Variance Inflation Factor (VIF) for collinearity
vif_values <- vif(model_q1)
```

there are higher-order terms (interactions) in this model  
consider setting type = 'predictor'; see ?vif

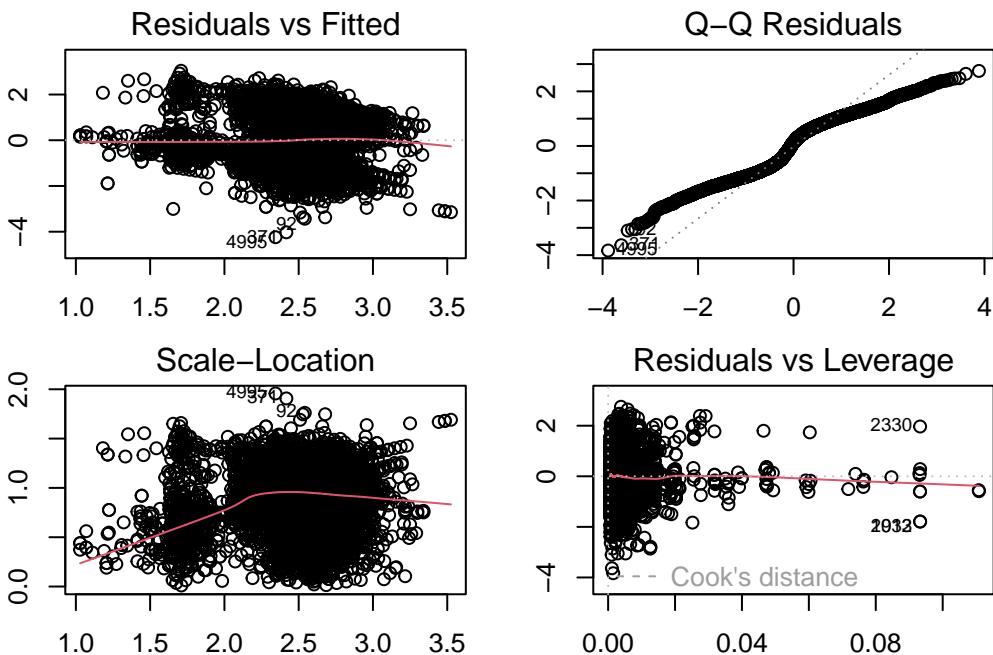
```
print("Variance Inflation Factor (VIF):")
```

```
[1] "Variance Inflation Factor (VIF):"
```

```
print(vif_values)
```

	GVIF	Df	GVIF^(1/(2*Df))
LogReachCms	3.128002e+01	1	5.592854
WeightClass	2.148248e+52	12	151.531708
Height	6.742370e+00	1	2.596607
WinStreak	1.010645e+00	1	1.005308
LogReachCms:WeightClass	2.184107e+52	12	151.636265

```
# 2. Residuals vs Fitted Plot for Linearity
par(mfrow = c(2, 2), mar = c(2, 2, 2, 2))  # Set plotting layout
plot(model_q1)
```



```

# 3. Normal Q-Q Plot for Normality of Residuals
qqnorm(residuals(model_q1))
qqline(residuals(model_q1))

# 4. Scale-Location Plot for Homoscedasticity
plot(model_q1, which = 3)

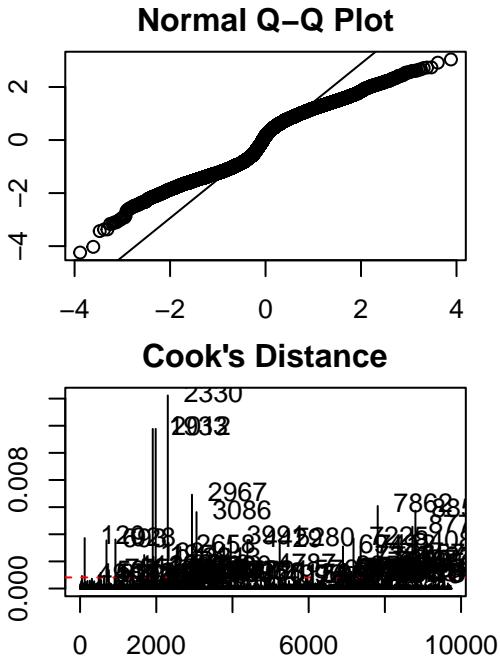
# 5. Check for influential points using Cook's Distance
cooksd <- cooks.distance(model_q1)
plot(cooksd, type = "h", main = "Cook's Distance", ylab = "Cook's Distance")

# Highlight observations with Cook's Distance > threshold
threshold <- 4 / nrow(ufc_clean)
influential <- which(cooksd > threshold)
abline(h = threshold, col = "red", lty = 2)
text(x = influential, y = cooksd[influential], labels = names(cooksd[influential]), pos = 4)

# 6. R-squared value
r_squared <- summary(model_q1)$r.squared
cat("R-squared:", r_squared, "\n")

```

R-squared: 0.05947709



```
# Load necessary library
library(knitr)

# Create a summary of the model
model_summary <- summary(model_q1)

# Extract coefficients and format into a data frame
coef_table <- as.data.frame(model_summary$coefficients)
colnames(coef_table) <- c("Estimate", "Std. Error", "t value", "Pr(>|t|)")

# Round to 3 decimal places
coef_table <- round(coef_table, 3)

# Create a kable table
kable(coef_table, caption = "Regression Coefficients for model_log", format = "markdown")
```

Table 1: Regression Coefficients for model\_log

	Estimate	Std. Error	t value	Pr(> t )
(Intercept)	20.300	5.246	3.870	0.000
LogReachCms	-3.367	1.036	-3.251	0.001

		Estimate	Error	Std. t value	Pr(> t )
WeightClassCatch	Weight	-9.848	12.912	-0.763	0.446
WeightClassFeatherweight		16.756	7.551	2.219	0.026
WeightClassFlyweight		57.697	9.121	6.326	0.000
WeightClassHeavyweight		-13.523	7.987	-1.693	0.090
WeightClassLight	Heavyweight	-14.172	8.268	-1.714	0.087
WeightClassLightweight		-0.405	6.949	-0.058	0.954
WeightClassMiddleweight		-5.138	7.523	-0.683	0.495
WeightClassWelterweight		-1.955	6.982	-0.280	0.779
WeightClassWomen's	Bantamweight	-10.914	11.779	-0.927	0.354
WeightClassWomen's	Featherweight	-1.751	31.479	-0.056	0.956
WeightClassWomen's	Flyweight	-23.948	10.169	-2.355	0.019
WeightClassWomen's	Strawweight	-42.489	9.155	-4.641	0.000
Height		-0.003	0.003	-0.986	0.324
WinStreak		0.041	0.007	6.065	0.000
LogReachCms:WeightClassCatch		1.781	2.488	0.716	0.474
Weight					
LogReachCms:WeightClassFeatherweight		-3.188	1.458	-2.186	0.029
LogReachCms:WeightClassFlyweight		-11.268	1.772	-6.357	0.000
LogReachCms:WeightClassHeavyweight		2.647	1.527	1.733	0.083
LogReachCms:WeightClassLight	Heavyweight	2.794	1.582	1.766	0.077
LogReachCms:WeightClassLightweight		0.155	1.342	0.116	0.908
LogReachCms:WeightClassMiddleweight		1.050	1.445	0.727	0.467
LogReachCms:WeightClassWelterweight		0.474	1.345	0.353	0.724
LogReachCms:WeightClassWomen's	Bantamweight	2.093	2.290	0.914	0.361
LogReachCms:WeightClassWomen's	Featherweight	0.144	6.098	0.024	0.981
LogReachCms:WeightClassWomen's	Flyweight	4.511	1.980	2.279	0.023
LogReachCms:WeightClassWomen's	Strawweight	8.273	1.791	4.620	0.000

Linearity assumption is not being met as the residuals show a curved pattern or non-linearity.

Fixes: polynomial

```
poly_model = lm(LogAvgSigStrLanded ~ poly(LogReachCms, 2) + WeightClass + poly(Height,2) + W
```

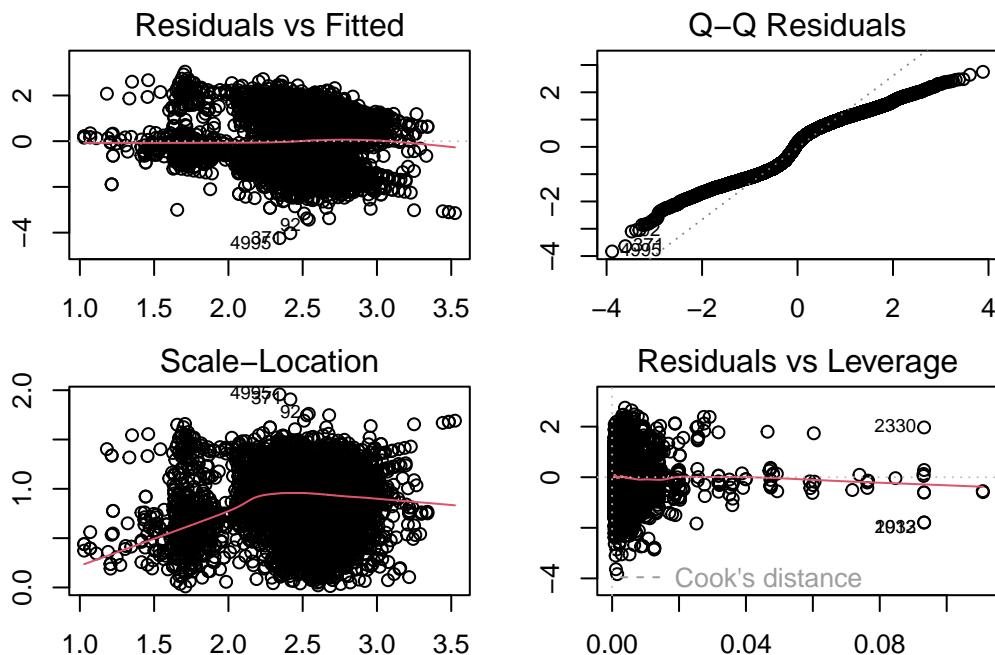
```
# 1. Check Variance Inflation Factor (VIF) for collinearity
vif_values <- vif(poly_model)
print("Variance Inflation Factor (VIF):")
```

```
[1] "Variance Inflation Factor (VIF):"
```

```
print(vif_values)
```

	GVIF	Df	GVIF^(1/(2*Df))
poly(LogReachCms, 2)	15.578234	2	1.986687
WeightClass	8.060771	12	1.090852
poly(Height, 2)	18.319963	2	2.068860
WinStreak	1.007098	1	1.003543

```
# 2. Residuals vs Fitted Plot for Linearity
par(mfrow = c(2, 2), mar = c(2, 2, 2, 2)) # Set plotting layout
plot(model_q1)
```



```

# 3. Normal Q-Q Plot for Normality of Residuals
qqnorm(residuals(poly_model))
qqline(residuals(poly_model))

# 4. Scale-Location Plot for Homoscedasticity
plot(poly_model, which = 3)

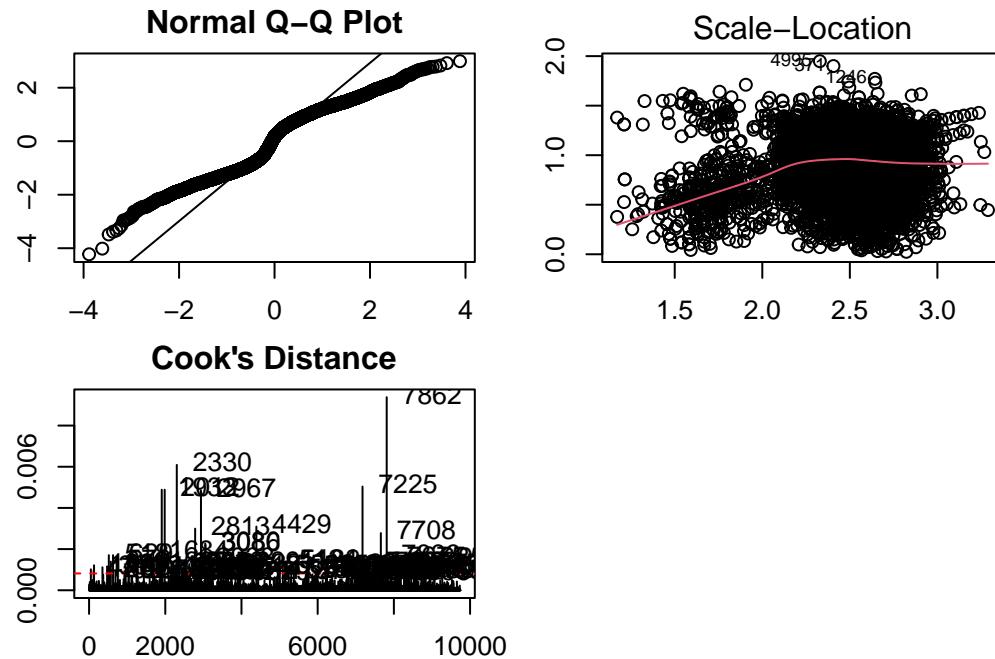
# 5. Check for influential points using Cook's Distance
cooksrd <- cooks.distance(poly_model)
plot(cooksrd, type = "h", main = "Cook's Distance", ylab = "Cook's Distance")

# Highlight observations with Cook's Distance > threshold
threshold <- 4 / nrow(ufc_clean)
influential <- which(cooksrd > threshold)
abline(h = threshold, col = "red", lty = 2)
text(x = influential, y = cooksrd[influential], labels = names(cooksrd[influential]), pos = 4)

# 6. R-squared value
r_squared <- summary(poly_model)$r.squared
cat("R-squared:", r_squared, "\n")

```

R-squared: 0.04880187



Does not work

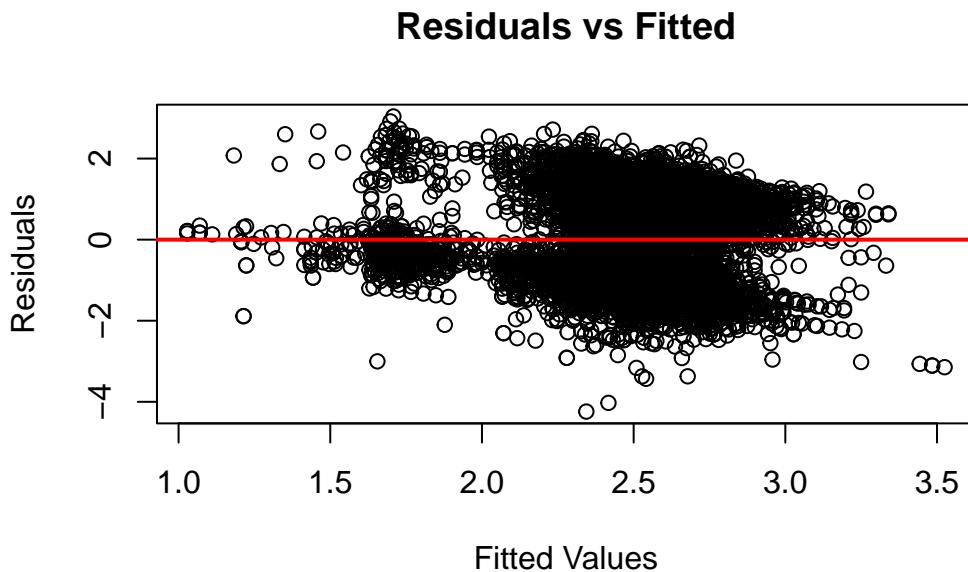
```
# Fit the model
model <- lm(LogAvgSigStrLanded ~ LogReachCms * WeightClass + Height + WinStreak, data = ufc_0)

# Calculate residuals
residuals <- residuals(model)

# Inspect the residuals
head(residuals)
```

```
1           2           3           4           5           6
-1.2878211 -0.4461468 -1.3258331 -0.4844299 -1.1768549 -1.4659361
```

```
# Plot residuals vs fitted values
plot(fitted(model), residuals, xlab = "Fitted Values", ylab = "Residuals", main = "Residuals vs Fitted")
abline(h = 0, col = "red", lwd = 2)
```

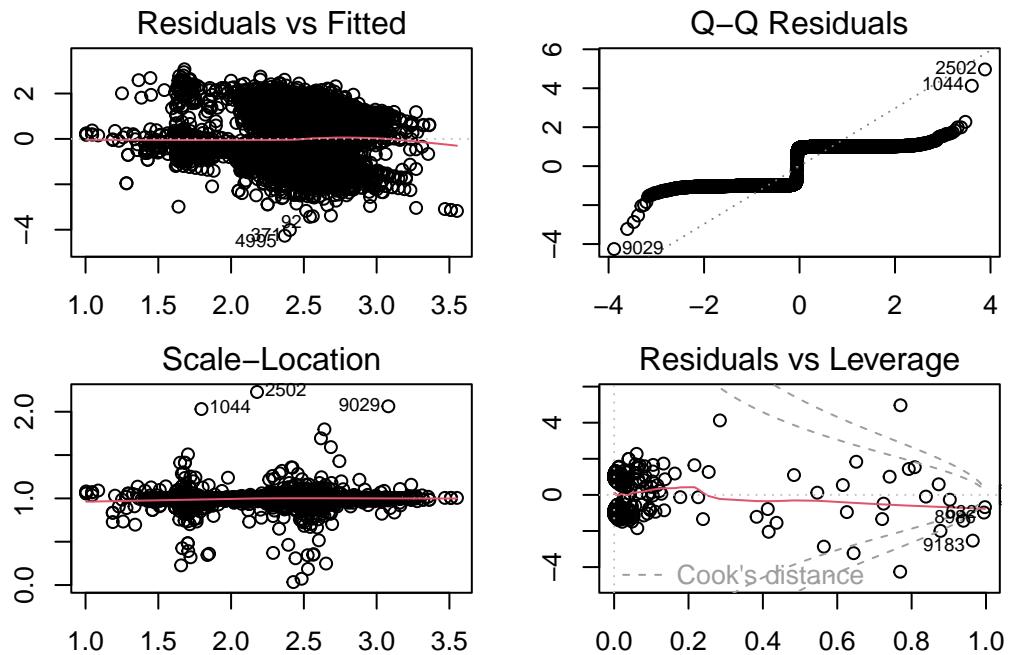


```
# Calculate weights (inverse variance of residuals)
weights <- 1 / (residuals^2)

# Fit a weighted least squares model
wls_model <- lm(LogAvgSigStrLanded ~ LogReachCms * WeightClass + Height + WinStreak, data = ufc_0)
```

```
# Diagnostic plots for WLS model
par(mfrow = c(2, 2), mar = c(2, 2, 2, 2))
plot(wls_model)
```

Warning in sqrt(crit \* p \* (1 - hh)/hh): NaNs produced  
 Warning in sqrt(crit \* p \* (1 - hh)/hh): NaNs produced



GLS

```
library(nlme)
```

Attaching package: 'nlme'

The following object is masked from 'package:dplyr':

collapse

```

gls_model <- gls(AvgSigStrLanded ~ poly(ReachCms, 3) * WeightClass + poly(Height, 8) + WinStrea
summary(gls_model)

```

Generalized least squares fit by REML  
 Model: AvgSigStrLanded ~ poly(ReachCms, 3) \* WeightClass + poly(Height, 8) + WinStrea  
 Data: ufc\_q1  
 AIC        BIC        logLik  
 81252.56 81704.72 -40563.28

Correlation Structure: AR(1)

Formula: ~1

Parameter estimate(s):

Phi

0.5946837

Coefficients:

	Value	Std.Error
(Intercept)	22.885	2.371
poly(ReachCms, 3)1	212.201	407.378
poly(ReachCms, 3)2	155.684	336.551
poly(ReachCms, 3)3	110.077	268.700
WeightClassCatch Weight	-4.176	2.874
WeightClassFeatherweight	-0.570	2.566
WeightClassFlyweight	6.675	9.107
WeightClassHeavyweight	-13.390	7.433
WeightClassLight Heavyweight	-14.284	5.781
WeightClassLightweight	0.395	2.464
WeightClassMiddleweight	-6.632	4.145
WeightClassWelterweight	-2.138	2.803
WeightClassWomen's Bantamweight	27.874	7.979
WeightClassWomen's Featherweight	-26.804	75.262
WeightClassWomen's Flyweight	14.475	11.951
WeightClassWomen's Strawweight	-49.813	28.400
poly(Height, 8)1	-11.895	37.136
poly(Height, 8)2	103.695	24.801
poly(Height, 8)3	-59.516	20.484
poly(Height, 8)4	-12.603	19.145
poly(Height, 8)5	-13.148	17.028
poly(Height, 8)6	-14.193	15.113
poly(Height, 8)7	-19.624	14.960
poly(Height, 8)8	-14.504	14.667

		t-value	p-value
WinStreak		0.773	0.088
poly(ReachCms, 3)1:WeightClassCatch Weight		-338.653	446.035
poly(ReachCms, 3)2:WeightClassCatch Weight		-284.008	379.517
poly(ReachCms, 3)3:WeightClassCatch Weight		-29.385	335.994
poly(ReachCms, 3)1:WeightClassFeatherweight		-22.363	478.832
poly(ReachCms, 3)2:WeightClassFeatherweight		50.223	375.649
poly(ReachCms, 3)3:WeightClassFeatherweight		267.237	357.159
poly(ReachCms, 3)1:WeightClassFlyweight		1341.666	1335.086
poly(ReachCms, 3)2:WeightClassFlyweight		1304.868	1059.043
poly(ReachCms, 3)3:WeightClassFlyweight		685.656	582.194
poly(ReachCms, 3)1:WeightClassHeavyweight		653.030	1074.634
poly(ReachCms, 3)2:WeightClassHeavyweight		-667.856	794.820
poly(ReachCms, 3)3:WeightClassHeavyweight		-52.116	378.256
poly(ReachCms, 3)1:WeightClassLight Heavyweight		1197.484	842.055
poly(ReachCms, 3)2:WeightClassLight Heavyweight		-1242.387	643.346
poly(ReachCms, 3)3:WeightClassLight Heavyweight		337.324	342.569
poly(ReachCms, 3)1:WeightClassLightweight		-88.785	481.788
poly(ReachCms, 3)2:WeightClassLightweight		314.429	359.533
poly(ReachCms, 3)3:WeightClassLightweight		374.280	369.267
poly(ReachCms, 3)1:WeightClassMiddleweight		172.577	698.783
poly(ReachCms, 3)2:WeightClassMiddleweight		-641.473	568.508
poly(ReachCms, 3)3:WeightClassMiddleweight		140.636	391.469
poly(ReachCms, 3)1:WeightClassWelterweight		-272.037	494.855
poly(ReachCms, 3)2:WeightClassWelterweight		-82.780	408.756
poly(ReachCms, 3)3:WeightClassWelterweight		-138.174	327.182
poly(ReachCms, 3)1:WeightClassWomen's Bantamweight		3881.664	1154.676
poly(ReachCms, 3)2:WeightClassWomen's Bantamweight		3118.013	950.874
poly(ReachCms, 3)3:WeightClassWomen's Bantamweight		1328.835	506.064
poly(ReachCms, 3)1:WeightClassWomen's Featherweight		-3200.960	13856.555
poly(ReachCms, 3)2:WeightClassWomen's Featherweight		-2439.707	10093.903
poly(ReachCms, 3)3:WeightClassWomen's Featherweight		-1045.104	7962.568
poly(ReachCms, 3)1:WeightClassWomen's Flyweight		1997.876	1585.758
poly(ReachCms, 3)2:WeightClassWomen's Flyweight		1352.117	1195.374
poly(ReachCms, 3)3:WeightClassWomen's Flyweight		550.912	531.714
poly(ReachCms, 3)1:WeightClassWomen's Strawweight		-5965.028	3159.472
poly(ReachCms, 3)2:WeightClassWomen's Strawweight		-3702.996	1938.256
poly(ReachCms, 3)3:WeightClassWomen's Strawweight		-985.713	585.309
(Intercept)		9.650389	0.0000
poly(ReachCms, 3)1		0.520895	0.6025
poly(ReachCms, 3)2		0.462588	0.6437
poly(ReachCms, 3)3		0.409664	0.6821
WeightClassCatch Weight		-1.453056	0.1462

WeightClassFeatherweight	-0.222105	0.8242
WeightClassFlyweight	0.732970	0.4636
WeightClassHeavyweight	-1.801427	0.0717
WeightClassLight Heavyweight	-2.470966	0.0135
WeightClassLightweight	0.160148	0.8728
WeightClassMiddleweight	-1.599963	0.1096
WeightClassWelterweight	-0.762790	0.4456
WeightClassWomen's Bantamweight	3.493558	0.0005
WeightClassWomen's Featherweight	-0.356143	0.7217
WeightClassWomen's Flyweight	1.211155	0.2259
WeightClassWomen's Strawweight	-1.753985	0.0795
poly(Height, 8)1	-0.320317	0.7487
poly(Height, 8)2	4.181004	0.0000
poly(Height, 8)3	-2.905465	0.0037
poly(Height, 8)4	-0.658283	0.5104
poly(Height, 8)5	-0.772111	0.4401
poly(Height, 8)6	-0.939103	0.3477
poly(Height, 8)7	-1.311789	0.1896
poly(Height, 8)8	-0.988939	0.3227
WinStreak	8.835078	0.0000
poly(ReachCms, 3)1:WeightClassCatch Weight	-0.759252	0.4477
poly(ReachCms, 3)2:WeightClassCatch Weight	-0.748340	0.4543
poly(ReachCms, 3)3:WeightClassCatch Weight	-0.087457	0.9303
poly(ReachCms, 3)1:WeightClassFeatherweight	-0.046704	0.9628
poly(ReachCms, 3)2:WeightClassFeatherweight	0.133697	0.8936
poly(ReachCms, 3)3:WeightClassFeatherweight	0.748231	0.4543
poly(ReachCms, 3)1:WeightClassFlyweight	1.004929	0.3150
poly(ReachCms, 3)2:WeightClassFlyweight	1.232120	0.2179
poly(ReachCms, 3)3:WeightClassFlyweight	1.177709	0.2389
poly(ReachCms, 3)1:WeightClassHeavyweight	0.607676	0.5434
poly(ReachCms, 3)2:WeightClassHeavyweight	-0.840261	0.4008
poly(ReachCms, 3)3:WeightClassHeavyweight	-0.137779	0.8904
poly(ReachCms, 3)1:WeightClassLight Heavyweight	1.422097	0.1550
poly(ReachCms, 3)2:WeightClassLight Heavyweight	-1.931132	0.0535
poly(ReachCms, 3)3:WeightClassLight Heavyweight	0.984692	0.3248
poly(ReachCms, 3)1:WeightClassLightweight	-0.184281	0.8538
poly(ReachCms, 3)2:WeightClassLightweight	0.874548	0.3818
poly(ReachCms, 3)3:WeightClassLightweight	1.013575	0.3108
poly(ReachCms, 3)1:WeightClassMiddleweight	0.246968	0.8049
poly(ReachCms, 3)2:WeightClassMiddleweight	-1.128345	0.2592
poly(ReachCms, 3)3:WeightClassMiddleweight	0.359253	0.7194
poly(ReachCms, 3)1:WeightClassWelterweight	-0.549732	0.5825
poly(ReachCms, 3)2:WeightClassWelterweight	-0.202517	0.8395

poly(ReachCms, 3)3:WeightClassWelterweight	-0.422316	0.6728
poly(ReachCms, 3)1:WeightClassWomen's Bantamweight	3.361691	0.0008
poly(ReachCms, 3)2:WeightClassWomen's Bantamweight	3.279101	0.0010
poly(ReachCms, 3)3:WeightClassWomen's Bantamweight	2.625821	0.0087
poly(ReachCms, 3)1:WeightClassWomen's Featherweight	-0.231007	0.8173
poly(ReachCms, 3)2:WeightClassWomen's Featherweight	-0.241701	0.8090
poly(ReachCms, 3)3:WeightClassWomen's Featherweight	-0.131252	0.8956
poly(ReachCms, 3)1:WeightClassWomen's Flyweight	1.259887	0.2077
poly(ReachCms, 3)2:WeightClassWomen's Flyweight	1.131125	0.2580
poly(ReachCms, 3)3:WeightClassWomen's Flyweight	1.036106	0.3002
poly(ReachCms, 3)1:WeightClassWomen's Strawweight	-1.887982	0.0591
poly(ReachCms, 3)2:WeightClassWomen's Strawweight	-1.910478	0.0561
poly(ReachCms, 3)3:WeightClassWomen's Strawweight	-1.684090	0.0922

Correlation:

	(Intr)	pl(RC,3)1	pl(RC,3)2
poly(ReachCms, 3)1	0.934		
poly(ReachCms, 3)2	0.925	0.973	
poly(ReachCms, 3)3	0.784	0.923	0.905
WeightClassCatch Weight	-0.805	-0.773	-0.767
WeightClassFeatherweight	-0.898	-0.864	-0.857
WeightClassFlyweight	-0.254	-0.248	-0.243
WeightClassHeavyweight	-0.308	-0.299	-0.297
WeightClassLight Heavyweight	-0.402	-0.381	-0.379
WeightClassLightweight	-0.934	-0.897	-0.890
WeightClassMiddleweight	-0.558	-0.539	-0.534
WeightClassWelterweight	-0.820	-0.786	-0.781
WeightClassWomen's Bantamweight	-0.286	-0.275	-0.270
WeightClassWomen's Featherweight	-0.025	-0.025	-0.023
WeightClassWomen's Flyweight	-0.192	-0.188	-0.182
WeightClassWomen's Strawweight	-0.082	-0.073	-0.076
poly(Height, 8)1	0.096	-0.012	0.040
poly(Height, 8)2	0.032	0.017	-0.029
poly(Height, 8)3	-0.045	0.005	0.008
poly(Height, 8)4	0.006	-0.012	0.019
poly(Height, 8)5	0.015	0.005	-0.028
poly(Height, 8)6	-0.004	0.000	-0.004
poly(Height, 8)7	-0.006	-0.009	0.018
poly(Height, 8)8	-0.010	-0.007	-0.019
WinStreak	-0.035	0.004	0.008
poly(ReachCms, 3)1:WeightClassCatch Weight	-0.864	-0.915	-0.894
poly(ReachCms, 3)2:WeightClassCatch Weight	-0.821	-0.864	-0.885
poly(ReachCms, 3)3:WeightClassCatch Weight	-0.620	-0.736	-0.722

poly(ReachCms, 3)1:WeightClassFeatherweight	-0.802	-0.851	-0.832
poly(ReachCms, 3)2:WeightClassFeatherweight	-0.832	-0.874	-0.895
poly(ReachCms, 3)3:WeightClassFeatherweight	-0.590	-0.696	-0.683
poly(ReachCms, 3)1:WeightClassFlyweight	-0.290	-0.309	-0.301
poly(ReachCms, 3)2:WeightClassFlyweight	-0.297	-0.314	-0.320
poly(ReachCms, 3)3:WeightClassFlyweight	-0.366	-0.431	-0.421
poly(ReachCms, 3)1:WeightClassHeavyweight	-0.362	-0.378	-0.369
poly(ReachCms, 3)2:WeightClassHeavyweight	-0.386	-0.413	-0.423
poly(ReachCms, 3)3:WeightClassHeavyweight	-0.561	-0.656	-0.644
poly(ReachCms, 3)1:WeightClassLight Heavyweight	-0.456	-0.485	-0.473
poly(ReachCms, 3)2:WeightClassLight Heavyweight	-0.482	-0.508	-0.521
poly(ReachCms, 3)3:WeightClassLight Heavyweight	-0.615	-0.725	-0.711
poly(ReachCms, 3)1:WeightClassLightweight	-0.789	-0.841	-0.821
poly(ReachCms, 3)2:WeightClassLightweight	-0.868	-0.912	-0.934
poly(ReachCms, 3)3:WeightClassLightweight	-0.562	-0.666	-0.654
poly(ReachCms, 3)1:WeightClassMiddleweight	-0.551	-0.578	-0.566
poly(ReachCms, 3)2:WeightClassMiddleweight	-0.543	-0.581	-0.593
poly(ReachCms, 3)3:WeightClassMiddleweight	-0.541	-0.628	-0.619
poly(ReachCms, 3)1:WeightClassWelterweight	-0.779	-0.826	-0.806
poly(ReachCms, 3)2:WeightClassWelterweight	-0.756	-0.799	-0.819
poly(ReachCms, 3)3:WeightClassWelterweight	-0.649	-0.762	-0.749
poly(ReachCms, 3)1:WeightClassWomen's Bantamweight	-0.330	-0.349	-0.340
poly(ReachCms, 3)2:WeightClassWomen's Bantamweight	-0.326	-0.342	-0.349
poly(ReachCms, 3)3:WeightClassWomen's Bantamweight	-0.414	-0.488	-0.478
poly(ReachCms, 3)1:WeightClassWomen's Featherweight	-0.021	-0.024	-0.022
poly(ReachCms, 3)2:WeightClassWomen's Featherweight	-0.025	-0.028	-0.027
poly(ReachCms, 3)3:WeightClassWomen's Featherweight	-0.019	-0.025	-0.022
poly(ReachCms, 3)1:WeightClassWomen's Flyweight	-0.242	-0.259	-0.250
poly(ReachCms, 3)2:WeightClassWomen's Flyweight	-0.262	-0.275	-0.279
poly(ReachCms, 3)3:WeightClassWomen's Flyweight	-0.396	-0.466	-0.454
poly(ReachCms, 3)1:WeightClassWomen's Strawweight	-0.122	-0.123	-0.125
poly(ReachCms, 3)2:WeightClassWomen's Strawweight	-0.162	-0.163	-0.171
poly(ReachCms, 3)3:WeightClassWomen's Strawweight	-0.362	-0.417	-0.412
pl(RC,3)3 WghCCW WghtClssFt			
poly(ReachCms, 3)1			
poly(ReachCms, 3)2			
poly(ReachCms, 3)3			
WeightClassCatch Weight	-0.649		
WeightClassFeatherweight	-0.725	0.743	
WeightClassFlyweight	-0.205	0.215	0.249
WeightClassHeavyweight	-0.255	0.253	0.277
WeightClassLight Heavyweight	-0.322	0.332	0.366
WeightClassLightweight	-0.753	0.773	0.866

WeightClassMiddleweight	-0.455	0.462	0.516
WeightClassWelterweight	-0.662	0.679	0.758
WeightClassWomen's Bantamweight	-0.231	0.234	0.263
WeightClassWomen's Featherweight	-0.023	0.020	0.024
WeightClassWomen's Flyweight	-0.156	0.166	0.174
WeightClassWomen's Strawweight	-0.058	0.068	0.072
poly(Height, 8)1	0.039	-0.080	-0.080
poly(Height, 8)2	-0.010	-0.029	-0.004
poly(Height, 8)3	-0.017	0.035	0.027
poly(Height, 8)4	0.024	0.005	-0.009
poly(Height, 8)5	0.001	-0.006	-0.025
poly(Height, 8)6	-0.033	-0.006	-0.013
poly(Height, 8)7	0.010	-0.010	0.018
poly(Height, 8)8	0.012	0.012	0.017
WinStreak	0.001	-0.011	-0.007
poly(ReachCms, 3)1:WeightClassCatch Weight	-0.847	0.762	0.799
poly(ReachCms, 3)2:WeightClassCatch Weight	-0.802	0.718	0.759
poly(ReachCms, 3)3:WeightClassCatch Weight	-0.796	0.518	0.574
poly(ReachCms, 3)1:WeightClassFeatherweight	-0.788	0.664	0.870
poly(ReachCms, 3)2:WeightClassFeatherweight	-0.811	0.689	0.934
poly(ReachCms, 3)3:WeightClassFeatherweight	-0.751	0.490	0.660
poly(ReachCms, 3)1:WeightClassFlyweight	-0.284	0.245	0.281
poly(ReachCms, 3)2:WeightClassFlyweight	-0.289	0.251	0.288
poly(ReachCms, 3)3:WeightClassFlyweight	-0.463	0.307	0.349
poly(ReachCms, 3)1:WeightClassHeavyweight	-0.348	0.302	0.341
poly(ReachCms, 3)2:WeightClassHeavyweight	-0.385	0.318	0.351
poly(ReachCms, 3)3:WeightClassHeavyweight	-0.710	0.465	0.524
poly(ReachCms, 3)1:WeightClassLight Heavyweight	-0.449	0.378	0.427
poly(ReachCms, 3)2:WeightClassLight Heavyweight	-0.471	0.401	0.441
poly(ReachCms, 3)3:WeightClassLight Heavyweight	-0.787	0.508	0.572
poly(ReachCms, 3)1:WeightClassLightweight	-0.781	0.654	0.726
poly(ReachCms, 3)2:WeightClassLightweight	-0.845	0.719	0.806
poly(ReachCms, 3)3:WeightClassLightweight	-0.724	0.468	0.515
poly(ReachCms, 3)1:WeightClassMiddleweight	-0.535	0.455	0.508
poly(ReachCms, 3)2:WeightClassMiddleweight	-0.539	0.452	0.504
poly(ReachCms, 3)3:WeightClassMiddleweight	-0.682	0.446	0.498
poly(ReachCms, 3)1:WeightClassWelterweight	-0.766	0.644	0.720
poly(ReachCms, 3)2:WeightClassWelterweight	-0.739	0.628	0.701
poly(ReachCms, 3)3:WeightClassWelterweight	-0.827	0.536	0.599
poly(ReachCms, 3)1:WeightClassWomen's Bantamweight	-0.326	0.271	0.304
poly(ReachCms, 3)2:WeightClassWomen's Bantamweight	-0.319	0.269	0.301
poly(ReachCms, 3)3:WeightClassWomen's Bantamweight	-0.529	0.342	0.382
poly(ReachCms, 3)1:WeightClassWomen's Featherweight	-0.025	0.017	0.021

poly(ReachCms, 3)2:WeightClassWomen's Featherweight	-0.029	0.020	0.024
poly(ReachCms, 3)3:WeightClassWomen's Featherweight	-0.031	0.015	0.018
poly(ReachCms, 3)1:WeightClassWomen's Flyweight	-0.238	0.207	0.221
poly(ReachCms, 3)2:WeightClassWomen's Flyweight	-0.254	0.222	0.239
poly(ReachCms, 3)3:WeightClassWomen's Flyweight	-0.502	0.332	0.364
poly(ReachCms, 3)1:WeightClassWomen's Strawweight	-0.112	0.102	0.110
poly(ReachCms, 3)2:WeightClassWomen's Strawweight	-0.149	0.136	0.146
poly(ReachCms, 3)3:WeightClassWomen's Strawweight	-0.451	0.301	0.331
		WghtClssFl	WghtCH
			WghCLH
poly(ReachCms, 3)1			
poly(ReachCms, 3)2			
poly(ReachCms, 3)3			
WeightClassCatch Weight			
WeightClassFeatherweight			
WeightClassFlyweight			
WeightClassHeavyweight	0.081		
WeightClassLight Heavyweight	0.092	0.138	
WeightClassLightweight	0.242	0.295	0.387
WeightClassMiddleweight	0.144	0.190	0.232
WeightClassWelterweight	0.212	0.263	0.340
WeightClassWomen's Bantamweight	0.073	0.094	0.128
WeightClassWomen's Featherweight	0.004	0.015	0.007
WeightClassWomen's Flyweight	0.046	0.062	0.078
WeightClassWomen's Strawweight	0.014	0.014	0.026
poly(Height, 8)1	0.018	-0.004	-0.048
poly(Height, 8)2	-0.021	0.095	-0.012
poly(Height, 8)3	0.000	0.134	0.001
poly(Height, 8)4	0.024	0.126	-0.009
poly(Height, 8)5	-0.011	0.146	0.046
poly(Height, 8)6	-0.011	0.146	0.063
poly(Height, 8)7	0.010	0.045	-0.010
poly(Height, 8)8	-0.001	-0.023	-0.045
WinStreak	0.008	0.009	0.036
poly(ReachCms, 3)1:WeightClassCatch Weight	0.224	0.274	0.355
poly(ReachCms, 3)2:WeightClassCatch Weight	0.215	0.261	0.338
poly(ReachCms, 3)3:WeightClassCatch Weight	0.168	0.206	0.256
poly(ReachCms, 3)1:WeightClassFeatherweight	0.230	0.249	0.325
poly(ReachCms, 3)2:WeightClassFeatherweight	0.236	0.256	0.336
poly(ReachCms, 3)3:WeightClassFeatherweight	0.178	0.183	0.238
poly(ReachCms, 3)1:WeightClassFlyweight	0.986	0.093	0.105
poly(ReachCms, 3)2:WeightClassFlyweight	0.971	0.097	0.107
poly(ReachCms, 3)3:WeightClassFlyweight	0.873	0.117	0.135
poly(ReachCms, 3)1:WeightClassHeavyweight	0.092	-0.756	0.137

		WghtCL	WghtCM	WghtCW	WgCW'B
poly(ReachCms, 3)2:WeightClassHeavyweight	0.106	0.961	0.171		
poly(ReachCms, 3)3:WeightClassHeavyweight	0.142	-0.436	0.220		
poly(ReachCms, 3)1:WeightClassLight Heavyweight	0.132	0.134	-0.603		
poly(ReachCms, 3)2:WeightClassLight Heavyweight	0.116	0.165	0.946		
poly(ReachCms, 3)3:WeightClassLight Heavyweight	0.169	0.195	-0.251		
poly(ReachCms, 3)1:WeightClassLightweight	0.206	0.254	0.326		
poly(ReachCms, 3)2:WeightClassLightweight	0.229	0.272	0.356		
poly(ReachCms, 3)3:WeightClassLightweight	0.146	0.186	0.235		
poly(ReachCms, 3)1:WeightClassMiddleweight	0.144	0.163	0.222		
poly(ReachCms, 3)2:WeightClassMiddleweight	0.145	0.186	0.226		
poly(ReachCms, 3)3:WeightClassMiddleweight	0.139	0.167	0.222		
poly(ReachCms, 3)1:WeightClassWelterweight	0.203	0.247	0.316		
poly(ReachCms, 3)2:WeightClassWelterweight	0.202	0.241	0.311		
poly(ReachCms, 3)3:WeightClassWelterweight	0.166	0.211	0.265		
poly(ReachCms, 3)1:WeightClassWomen's Bantamweight	0.084	0.110	0.146		
poly(ReachCms, 3)2:WeightClassWomen's Bantamweight	0.084	0.108	0.147		
poly(ReachCms, 3)3:WeightClassWomen's Bantamweight	0.108	0.138	0.181		
poly(ReachCms, 3)1:WeightClassWomen's Featherweight	0.004	0.014	0.005		
poly(ReachCms, 3)2:WeightClassWomen's Featherweight	0.005	0.015	0.007		
poly(ReachCms, 3)3:WeightClassWomen's Featherweight	0.004	0.013	0.004		
poly(ReachCms, 3)1:WeightClassWomen's Flyweight	0.059	0.080	0.099		
poly(ReachCms, 3)2:WeightClassWomen's Flyweight	0.065	0.087	0.108		
poly(ReachCms, 3)3:WeightClassWomen's Flyweight	0.101	0.131	0.163		
poly(ReachCms, 3)1:WeightClassWomen's Strawweight	0.023	0.027	0.043		
poly(ReachCms, 3)2:WeightClassWomen's Strawweight	0.033	0.040	0.060		
poly(ReachCms, 3)3:WeightClassWomen's Strawweight	0.085	0.107	0.143		
poly(ReachCms, 3)1					
poly(ReachCms, 3)2					
poly(ReachCms, 3)3					
WeightClassCatch Weight					
WeightClassFeatherweight					
WeightClassFlyweight					
WeightClassHeavyweight					
WeightClassLight Heavyweight					
WeightClassLightweight					
WeightClassMiddleweight	0.543				
WeightClassWelterweight	0.791	0.473			
WeightClassWomen's Bantamweight	0.275	0.162	0.242		
WeightClassWomen's Featherweight	0.021	0.007	0.018	0.005	
WeightClassWomen's Flyweight	0.184	0.113	0.164	0.052	
WeightClassWomen's Strawweight	0.079	0.047	0.069	0.004	
poly(Height, 8)1	-0.097	-0.040	-0.088	-0.045	

poly(Height, 8)2	0.008	0.009	0.015	0.030
poly(Height, 8)3	0.025	0.012	0.032	-0.007
poly(Height, 8)4	-0.013	-0.012	-0.029	0.010
poly(Height, 8)5	-0.001	0.000	-0.002	-0.036
poly(Height, 8)6	-0.003	0.002	-0.002	0.019
poly(Height, 8)7	0.000	0.002	-0.002	0.028
poly(Height, 8)8	0.017	0.027	0.021	-0.038
WinStreak	-0.013	-0.002	-0.014	-0.003
poly(ReachCms, 3)1:WeightClassCatch Weight	0.829	0.497	0.728	0.256
poly(ReachCms, 3)2:WeightClassCatch Weight	0.788	0.473	0.693	0.237
poly(ReachCms, 3)3:WeightClassCatch Weight	0.597	0.361	0.522	0.183
poly(ReachCms, 3)1:WeightClassFeatherweight	0.772	0.463	0.674	0.235
poly(ReachCms, 3)2:WeightClassFeatherweight	0.801	0.480	0.699	0.240
poly(ReachCms, 3)3:WeightClassFeatherweight	0.570	0.347	0.496	0.170
poly(ReachCms, 3)1:WeightClassFlyweight	0.277	0.165	0.243	0.085
poly(ReachCms, 3)2:WeightClassFlyweight	0.284	0.169	0.249	0.087
poly(ReachCms, 3)3:WeightClassFlyweight	0.350	0.210	0.308	0.108
poly(ReachCms, 3)1:WeightClassHeavyweight	0.348	0.196	0.302	0.103
poly(ReachCms, 3)2:WeightClassHeavyweight	0.371	0.234	0.327	0.115
poly(ReachCms, 3)3:WeightClassHeavyweight	0.539	0.318	0.473	0.164
poly(ReachCms, 3)1:WeightClassLight Heavyweight	0.437	0.261	0.384	0.127
poly(ReachCms, 3)2:WeightClassLight Heavyweight	0.465	0.279	0.406	0.144
poly(ReachCms, 3)3:WeightClassLight Heavyweight	0.591	0.357	0.521	0.181
poly(ReachCms, 3)1:WeightClassLightweight	0.728	0.456	0.663	0.234
poly(ReachCms, 3)2:WeightClassLightweight	0.934	0.505	0.733	0.251
poly(ReachCms, 3)3:WeightClassLightweight	0.508	0.329	0.473	0.168
poly(ReachCms, 3)1:WeightClassMiddleweight	0.523	-0.343	0.462	0.167
poly(ReachCms, 3)2:WeightClassMiddleweight	0.528	0.958	0.460	0.153
poly(ReachCms, 3)3:WeightClassMiddleweight	0.515	-0.225	0.455	0.164
poly(ReachCms, 3)1:WeightClassWelterweight	0.745	0.447	0.361	0.229
poly(ReachCms, 3)2:WeightClassWelterweight	0.730	0.439	0.941	0.221
poly(ReachCms, 3)3:WeightClassWelterweight	0.621	0.374	0.291	0.190
poly(ReachCms, 3)1:WeightClassWomen's Bantamweight	0.317	0.188	0.279	0.977
poly(ReachCms, 3)2:WeightClassWomen's Bantamweight	0.314	0.187	0.275	0.943
poly(ReachCms, 3)3:WeightClassWomen's Bantamweight	0.399	0.238	0.349	0.813
poly(ReachCms, 3)1:WeightClassWomen's Featherweight	0.017	0.005	0.015	0.004
poly(ReachCms, 3)2:WeightClassWomen's Featherweight	0.021	0.007	0.018	0.005
poly(ReachCms, 3)3:WeightClassWomen's Featherweight	0.015	0.004	0.013	0.003
poly(ReachCms, 3)1:WeightClassWomen's Flyweight	0.233	0.143	0.207	0.068
poly(ReachCms, 3)2:WeightClassWomen's Flyweight	0.251	0.154	0.223	0.073
poly(ReachCms, 3)3:WeightClassWomen's Flyweight	0.379	0.233	0.336	0.117
poly(ReachCms, 3)1:WeightClassWomen's Strawweight	0.118	0.070	0.103	0.016
poly(ReachCms, 3)2:WeightClassWomen's Strawweight	0.156	0.093	0.137	0.027

poly(ReachCms, 3)3:WeightClassWomen's Strawweight	0.347	0.209	0.304	0.088
				WghtClssWmn'sFt
poly(ReachCms, 3)1				
poly(ReachCms, 3)2				
poly(ReachCms, 3)3				
WeightClassCatch Weight				
WeightClassFeatherweight				
WeightClassFlyweight				
WeightClassHeavyweight				
WeightClassLight Heavyweight				
WeightClassLightweight				
WeightClassMiddleweight				
WeightClassWelterweight				
WeightClassWomen's Bantamweight				
WeightClassWomen's Featherweight				
WeightClassWomen's Flyweight	0.020			
WeightClassWomen's Strawweight	0.013			
poly(Height, 8)1	0.010			
poly(Height, 8)2	-0.026			
poly(Height, 8)3	0.023			
poly(Height, 8)4	-0.006			
poly(Height, 8)5	-0.017			
poly(Height, 8)6	0.012			
poly(Height, 8)7	0.008			
poly(Height, 8)8	0.017			
WinStreak	0.015			
poly(ReachCms, 3)1:WeightClassCatch Weight	0.021			
poly(ReachCms, 3)2:WeightClassCatch Weight	0.021			
poly(ReachCms, 3)3:WeightClassCatch Weight	0.017			
poly(ReachCms, 3)1:WeightClassFeatherweight	0.021			
poly(ReachCms, 3)2:WeightClassFeatherweight	0.022			
poly(ReachCms, 3)3:WeightClassFeatherweight	0.016			
poly(ReachCms, 3)1:WeightClassFlyweight	0.004			
poly(ReachCms, 3)2:WeightClassFlyweight	0.005			
poly(ReachCms, 3)3:WeightClassFlyweight	0.008			
poly(ReachCms, 3)1:WeightClassHeavyweight	0.001			
poly(ReachCms, 3)2:WeightClassHeavyweight	0.019			
poly(ReachCms, 3)3:WeightClassHeavyweight	0.010			
poly(ReachCms, 3)1:WeightClassLight Heavyweight	0.016			
poly(ReachCms, 3)2:WeightClassLight Heavyweight	0.008			
poly(ReachCms, 3)3:WeightClassLight Heavyweight	0.021			
poly(ReachCms, 3)1:WeightClassLightweight	0.020			
poly(ReachCms, 3)2:WeightClassLightweight	0.020			

poly(ReachCms, 3)3:WeightClassLightweight	0.016	
poly(ReachCms, 3)1:WeightClassMiddleweight	0.022	
poly(ReachCms, 3)2:WeightClassMiddleweight	0.005	
poly(ReachCms, 3)3:WeightClassMiddleweight	0.024	
poly(ReachCms, 3)1:WeightClassWelterweight	0.022	
poly(ReachCms, 3)2:WeightClassWelterweight	0.017	
poly(ReachCms, 3)3:WeightClassWelterweight	0.021	
poly(ReachCms, 3)1:WeightClassWomen's Bantamweight	0.006	
poly(ReachCms, 3)2:WeightClassWomen's Bantamweight	0.006	
poly(ReachCms, 3)3:WeightClassWomen's Bantamweight	0.009	
poly(ReachCms, 3)1:WeightClassWomen's Featherweight	0.995	
poly(ReachCms, 3)2:WeightClassWomen's Featherweight	0.998	
poly(ReachCms, 3)3:WeightClassWomen's Featherweight	0.978	
poly(ReachCms, 3)1:WeightClassWomen's Flyweight	0.020	
poly(ReachCms, 3)2:WeightClassWomen's Flyweight	0.020	
poly(ReachCms, 3)3:WeightClassWomen's Flyweight	0.022	
poly(ReachCms, 3)1:WeightClassWomen's Strawweight	0.014	
poly(ReachCms, 3)2:WeightClassWomen's Strawweight	0.016	
poly(ReachCms, 3)3:WeightClassWomen's Strawweight	0.022	
WghtClssWmn'sFl WgCW'S		
poly(ReachCms, 3)1		
poly(ReachCms, 3)2		
poly(ReachCms, 3)3		
WeightClassCatch Weight		
WeightClassFeatherweight		
WeightClassFlyweight		
WeightClassHeavyweight		
WeightClassLight Heavyweight		
WeightClassLightweight		
WeightClassMiddleweight		
WeightClassWelterweight		
WeightClassWomen's Bantamweight		
WeightClassWomen's Featherweight		
WeightClassWomen's Flyweight		
WeightClassWomen's Strawweight	0.006	
poly(Height, 8)1	0.010	0.023
poly(Height, 8)2	-0.008	-0.070
poly(Height, 8)3	-0.006	0.105
poly(Height, 8)4	0.019	-0.137
poly(Height, 8)5	-0.014	0.131
poly(Height, 8)6	0.006	-0.064
poly(Height, 8)7	0.015	-0.029
poly(Height, 8)8	-0.014	0.082

		p(H,8)1	p(H,8)2	p(H,8)3
WinStreak		0.012	0.015	
poly(ReachCms, 3)1:WeightClassCatch Weight		0.162	0.064	
poly(ReachCms, 3)2:WeightClassCatch Weight		0.171	0.070	
poly(ReachCms, 3)3:WeightClassCatch Weight		0.131	0.038	
poly(ReachCms, 3)1:WeightClassFeatherweight		0.161	0.064	
poly(ReachCms, 3)2:WeightClassFeatherweight		0.163	0.066	
poly(ReachCms, 3)3:WeightClassFeatherweight		0.120	0.046	
poly(ReachCms, 3)1:WeightClassFlyweight		0.053	0.015	
poly(ReachCms, 3)2:WeightClassFlyweight		0.054	0.015	
poly(ReachCms, 3)3:WeightClassFlyweight		0.069	0.018	
poly(ReachCms, 3)1:WeightClassHeavyweight		0.069	0.038	
poly(ReachCms, 3)2:WeightClassHeavyweight		0.080	0.023	
poly(ReachCms, 3)3:WeightClassHeavyweight		0.108	0.049	
poly(ReachCms, 3)1:WeightClassLight Heavyweight		0.090	0.042	
poly(ReachCms, 3)2:WeightClassLight Heavyweight		0.097	0.033	
poly(ReachCms, 3)3:WeightClassLight Heavyweight		0.120	0.050	
poly(ReachCms, 3)1:WeightClassLightweight		0.159	0.062	
poly(ReachCms, 3)2:WeightClassLightweight		0.171	0.073	
poly(ReachCms, 3)3:WeightClassLightweight		0.112	0.045	
poly(ReachCms, 3)1:WeightClassMiddleweight		0.106	0.043	
poly(ReachCms, 3)2:WeightClassMiddleweight		0.112	0.045	
poly(ReachCms, 3)3:WeightClassMiddleweight		0.103	0.042	
poly(ReachCms, 3)1:WeightClassWelterweight		0.152	0.060	
poly(ReachCms, 3)2:WeightClassWelterweight		0.152	0.063	
poly(ReachCms, 3)3:WeightClassWelterweight		0.126	0.052	
poly(ReachCms, 3)1:WeightClassWomen's Bantamweight		0.062	0.002	
poly(ReachCms, 3)2:WeightClassWomen's Bantamweight		0.061	0.002	
poly(ReachCms, 3)3:WeightClassWomen's Bantamweight		0.081	-0.001	
poly(ReachCms, 3)1:WeightClassWomen's Featherweight		0.018	0.012	
poly(ReachCms, 3)2:WeightClassWomen's Featherweight		0.018	0.013	
poly(ReachCms, 3)3:WeightClassWomen's Featherweight		0.014	0.012	
poly(ReachCms, 3)1:WeightClassWomen's Flyweight		0.989	0.009	
poly(ReachCms, 3)2:WeightClassWomen's Flyweight		0.966	0.010	
poly(ReachCms, 3)3:WeightClassWomen's Flyweight		0.851	0.014	
poly(ReachCms, 3)1:WeightClassWomen's Strawweight		0.014	0.996	
poly(ReachCms, 3)2:WeightClassWomen's Strawweight		0.021	0.982	
poly(ReachCms, 3)3:WeightClassWomen's Strawweight		0.063	0.884	
poly(ReachCms, 3)1				
poly(ReachCms, 3)2				
poly(ReachCms, 3)3				
WeightClassCatch Weight				
WeightClassFeatherweight				

WeightClassFlyweight				
WeightClassHeavyweight				
WeightClassLight Heavyweight				
WeightClassLightweight				
WeightClassMiddleweight				
WeightClassWelterweight				
WeightClassWomen's Bantamweight				
WeightClassWomen's Featherweight				
WeightClassWomen's Flyweight				
WeightClassWomen's Strawweight				
poly(Height, 8)1				
poly(Height, 8)2	-0.099			
poly(Height, 8)3	-0.071	-0.139		
poly(Height, 8)4	0.012	-0.088	-0.017	
poly(Height, 8)5	-0.030	0.083	-0.042	
poly(Height, 8)6	0.030	0.012	0.094	
poly(Height, 8)7	0.021	0.042	0.002	
poly(Height, 8)8	-0.008	0.026	0.023	
WinStreak	0.013	-0.011	0.043	
poly(ReachCms, 3)1:WeightClassCatch Weight	-0.066	-0.012	0.007	
poly(ReachCms, 3)2:WeightClassCatch Weight	-0.031	-0.021	0.013	
poly(ReachCms, 3)3:WeightClassCatch Weight	-0.019	0.032	-0.032	
poly(ReachCms, 3)1:WeightClassFeatherweight	-0.039	-0.022	0.017	
poly(ReachCms, 3)2:WeightClassFeatherweight	-0.042	-0.010	0.006	
poly(ReachCms, 3)3:WeightClassFeatherweight	-0.018	-0.013	0.004	
poly(ReachCms, 3)1:WeightClassFlyweight	0.005	-0.010	-0.002	
poly(ReachCms, 3)2:WeightClassFlyweight	0.007	-0.017	0.007	
poly(ReachCms, 3)3:WeightClassFlyweight	-0.003	-0.010	0.004	
poly(ReachCms, 3)1:WeightClassHeavyweight	-0.066	-0.116	-0.121	
poly(ReachCms, 3)2:WeightClassHeavyweight	0.028	0.095	0.123	
poly(ReachCms, 3)3:WeightClassHeavyweight	-0.054	-0.064	-0.132	
poly(ReachCms, 3)1:WeightClassLight Heavyweight	-0.043	-0.009	0.033	
poly(ReachCms, 3)2:WeightClassLight Heavyweight	0.003	-0.011	-0.038	
poly(ReachCms, 3)3:WeightClassLight Heavyweight	-0.041	0.029	0.030	
poly(ReachCms, 3)1:WeightClassLightweight	-0.031	-0.020	0.013	
poly(ReachCms, 3)2:WeightClassLightweight	-0.041	-0.004	-0.005	
poly(ReachCms, 3)3:WeightClassLightweight	-0.022	0.002	0.002	
poly(ReachCms, 3)1:WeightClassMiddleweight	-0.074	-0.028	0.032	
poly(ReachCms, 3)2:WeightClassMiddleweight	0.033	0.015	-0.032	
poly(ReachCms, 3)3:WeightClassMiddleweight	-0.072	-0.006	0.026	
poly(ReachCms, 3)1:WeightClassWelterweight	-0.056	-0.027	0.022	
poly(ReachCms, 3)2:WeightClassWelterweight	-0.005	0.008	-0.017	
poly(ReachCms, 3)3:WeightClassWelterweight	-0.048	0.005	0.009	

poly(ReachCms, 3)1:WeightClassWomen's Bantamweight	-0.047	0.037	-0.019
poly(ReachCms, 3)2:WeightClassWomen's Bantamweight	-0.042	0.036	-0.019
poly(ReachCms, 3)3:WeightClassWomen's Bantamweight	-0.049	0.054	-0.043
poly(ReachCms, 3)1:WeightClassWomen's Featherweight	0.011	-0.027	0.021
poly(ReachCms, 3)2:WeightClassWomen's Featherweight	0.012	-0.026	0.022
poly(ReachCms, 3)3:WeightClassWomen's Featherweight	0.012	-0.029	0.020
poly(ReachCms, 3)1:WeightClassWomen's Flyweight	-0.002	0.002	-0.008
poly(ReachCms, 3)2:WeightClassWomen's Flyweight	-0.004	0.000	-0.003
poly(ReachCms, 3)3:WeightClassWomen's Flyweight	-0.016	0.008	-0.008
poly(ReachCms, 3)1:WeightClassWomen's Strawweight	0.019	-0.070	0.110
poly(ReachCms, 3)2:WeightClassWomen's Strawweight	0.022	-0.081	0.125
poly(ReachCms, 3)3:WeightClassWomen's Strawweight	0.013	-0.078	0.123
	p(H,8)4	p(H,8)5	p(H,8)6
poly(ReachCms, 3)1			
poly(ReachCms, 3)2			
poly(ReachCms, 3)3			
WeightClassCatch Weight			
WeightClassFeatherweight			
WeightClassFlyweight			
WeightClassHeavyweight			
WeightClassLight Heavyweight			
WeightClassLightweight			
WeightClassMiddleweight			
WeightClassWelterweight			
WeightClassWomen's Bantamweight			
WeightClassWomen's Featherweight			
WeightClassWomen's Flyweight			
WeightClassWomen's Strawweight			
poly(Height, 8)1			
poly(Height, 8)2			
poly(Height, 8)3			
poly(Height, 8)4			
poly(Height, 8)5	0.042		
poly(Height, 8)6	-0.081	0.000	
poly(Height, 8)7	0.040	-0.146	-0.008
poly(Height, 8)8	-0.050	0.017	-0.087
WinStreak	0.009	-0.029	-0.006
poly(ReachCms, 3)1:WeightClassCatch Weight	0.020	-0.004	-0.014
poly(ReachCms, 3)2:WeightClassCatch Weight	-0.002	0.022	0.005
poly(ReachCms, 3)3:WeightClassCatch Weight	0.008	0.015	0.010
poly(ReachCms, 3)1:WeightClassFeatherweight	0.003	-0.021	-0.011
poly(ReachCms, 3)2:WeightClassFeatherweight	0.009	-0.011	-0.023
poly(ReachCms, 3)3:WeightClassFeatherweight	0.000	0.002	-0.010

poly(ReachCms, 3)1:WeightClassFlyweight	0.022	-0.006	-0.009
poly(ReachCms, 3)2:WeightClassFlyweight	0.021	-0.012	0.003
poly(ReachCms, 3)3:WeightClassFlyweight	0.020	-0.015	0.005
poly(ReachCms, 3)1:WeightClassHeavyweight	-0.134	-0.158	-0.145
poly(ReachCms, 3)2:WeightClassHeavyweight	0.161	0.186	0.143
poly(ReachCms, 3)3:WeightClassHeavyweight	-0.197	-0.156	-0.082
poly(ReachCms, 3)1:WeightClassLight Heavyweight	0.012	-0.060	-0.063
poly(ReachCms, 3)2:WeightClassLight Heavyweight	0.007	0.082	0.057
poly(ReachCms, 3)3:WeightClassLight Heavyweight	-0.035	-0.038	0.000
poly(ReachCms, 3)1:WeightClassLightweight	0.005	0.005	-0.001
poly(ReachCms, 3)2:WeightClassLightweight	0.014	0.011	-0.025
poly(ReachCms, 3)3:WeightClassLightweight	-0.015	0.034	0.013
poly(ReachCms, 3)1:WeightClassMiddleweight	0.009	-0.019	-0.001
poly(ReachCms, 3)2:WeightClassMiddleweight	0.003	0.034	-0.007
poly(ReachCms, 3)3:WeightClassMiddleweight	-0.016	0.006	0.031
poly(ReachCms, 3)1:WeightClassWelterweight	0.016	-0.017	0.010
poly(ReachCms, 3)2:WeightClassWelterweight	0.000	0.027	-0.030
poly(ReachCms, 3)3:WeightClassWelterweight	-0.011	0.019	0.037
poly(ReachCms, 3)1:WeightClassWomen's Bantamweight	0.021	-0.042	0.019
poly(ReachCms, 3)2:WeightClassWomen's Bantamweight	0.020	-0.039	0.015
poly(ReachCms, 3)3:WeightClassWomen's Bantamweight	0.038	-0.043	0.015
poly(ReachCms, 3)1:WeightClassWomen's Featherweight	-0.005	-0.015	0.012
poly(ReachCms, 3)2:WeightClassWomen's Featherweight	-0.005	-0.016	0.012
poly(ReachCms, 3)3:WeightClassWomen's Featherweight	-0.003	-0.013	0.011
poly(ReachCms, 3)1:WeightClassWomen's Flyweight	0.018	-0.014	0.012
poly(ReachCms, 3)2:WeightClassWomen's Flyweight	0.015	-0.016	0.021
poly(ReachCms, 3)3:WeightClassWomen's Flyweight	0.020	-0.029	0.031
poly(ReachCms, 3)1:WeightClassWomen's Strawweight	-0.144	0.134	-0.062
poly(ReachCms, 3)2:WeightClassWomen's Strawweight	-0.156	0.136	-0.053
poly(ReachCms, 3)3:WeightClassWomen's Strawweight	-0.145	0.107	-0.026
p(H,8)7 p(H,8)8 WnStrk			
poly(ReachCms, 3)1			
poly(ReachCms, 3)2			
poly(ReachCms, 3)3			
WeightClassCatch Weight			
WeightClassFeatherweight			
WeightClassFlyweight			
WeightClassHeavyweight			
WeightClassLight Heavyweight			
WeightClassLightweight			
WeightClassMiddleweight			
WeightClassWelterweight			
WeightClassWomen's Bantamweight			

WeightClassWomen's Featherweight			
WeightClassWomen's Flyweight			
WeightClassWomen's Strawweight			
poly(Height, 8)1	0.005		
poly(Height, 8)2	-0.020	-0.009	
poly(Height, 8)3	0.007	-0.006	-0.008
poly(Height, 8)4	-0.031	0.023	-0.010
poly(Height, 8)5	0.005	-0.023	-0.003
poly(Height, 8)6	0.002	0.015	-0.004
poly(Height, 8)7	0.006	0.029	-0.005
poly(Height, 8)8	-0.023	0.015	-0.005
WinStreak	0.013	-0.001	0.006
poly(ReachCms, 3)1:WeightClassCatch Weight	0.011	-0.007	0.004
poly(ReachCms, 3)2:WeightClassCatch Weight	0.023	-0.015	-0.001
poly(ReachCms, 3)3:WeightClassCatch Weight	-0.040	0.026	-0.013
poly(ReachCms, 3)1:WeightClassFeatherweight	0.029	-0.016	0.005
poly(ReachCms, 3)2:WeightClassFeatherweight	-0.029	0.010	-0.008
poly(ReachCms, 3)3:WeightClassFeatherweight	0.019	0.054	-0.040
poly(ReachCms, 3)1:WeightClassFlyweight	-0.035	-0.045	0.032
poly(ReachCms, 3)2:WeightClassFlyweight	0.009	0.019	-0.035
poly(ReachCms, 3)3:WeightClassFlyweight	-0.013	0.006	-0.013
poly(ReachCms, 3)1:WeightClassHeavyweight	-0.005	0.035	-0.009
poly(ReachCms, 3)2:WeightClassHeavyweight	-0.047	-0.003	-0.010
poly(ReachCms, 3)3:WeightClassHeavyweight	0.011	-0.016	-0.002
poly(ReachCms, 3)1:WeightClassLight Heavyweight	-0.023	0.034	-0.009
poly(ReachCms, 3)2:WeightClassLight Heavyweight	-0.017	-0.044	0.008
poly(ReachCms, 3)3:WeightClassLight Heavyweight	0.012	-0.007	0.004
poly(ReachCms, 3)1:WeightClassMiddleweight	-0.022	0.039	-0.016
poly(ReachCms, 3)2:WeightClassMiddleweight	-0.035	-0.031	0.009
poly(ReachCms, 3)3:WeightClassMiddleweight	0.034	-0.044	-0.001
poly(ReachCms, 3)1:WeightClassWomen's Bantamweight	0.033	-0.040	0.002
poly(ReachCms, 3)2:WeightClassWomen's Bantamweight	0.038	-0.049	0.005
poly(ReachCms, 3)3:WeightClassWomen's Bantamweight	0.009	0.018	0.013
poly(ReachCms, 3)1:WeightClassWomen's Featherweight	0.008	0.017	0.015
poly(ReachCms, 3)2:WeightClassWomen's Featherweight	0.009	0.020	0.011
poly(ReachCms, 3)3:WeightClassWomen's Featherweight	0.014	-0.020	0.010

poly(ReachCms, 3)2:WeightClassWomen's Flyweight	0.012	-0.026	0.008
poly(ReachCms, 3)3:WeightClassWomen's Flyweight	0.022	-0.044	0.005
poly(ReachCms, 3)1:WeightClassWomen's Strawweight	-0.032	0.083	0.015
poly(ReachCms, 3)2:WeightClassWomen's Strawweight	-0.040	0.083	0.015
poly(ReachCms, 3)3:WeightClassWomen's Strawweight	-0.037	0.059	0.015
	p(RC,3)1W p(RC,3)2W		
poly(ReachCms, 3)1			
poly(ReachCms, 3)2			
poly(ReachCms, 3)3			
WeightClassCatch Weight			
WeightClassFeatherweight			
WeightClassFlyweight			
WeightClassHeavyweight			
WeightClassLight Heavyweight			
WeightClassLightweight			
WeightClassMiddleweight			
WeightClassWelterweight			
WeightClassWomen's Bantamweight			
WeightClassWomen's Featherweight			
WeightClassWomen's Flyweight			
WeightClassWomen's Strawweight			
poly(Height, 8)1			
poly(Height, 8)2			
poly(Height, 8)3			
poly(Height, 8)4			
poly(Height, 8)5			
poly(Height, 8)6			
poly(Height, 8)7			
poly(Height, 8)8			
WinStreak			
poly(ReachCms, 3)1:WeightClassCatch Weight	0.822		
poly(ReachCms, 3)2:WeightClassCatch Weight	0.669	0.758	
poly(ReachCms, 3)3:WeightClassCatch Weight	0.783	0.738	
poly(ReachCms, 3)1:WeightClassFeatherweight	0.804	0.794	
poly(ReachCms, 3)2:WeightClassFeatherweight	0.638	0.605	
poly(ReachCms, 3)3:WeightClassFeatherweight	0.281	0.266	
poly(ReachCms, 3)1:WeightClassFlyweight	0.285	0.283	
poly(ReachCms, 3)2:WeightClassFlyweight	0.393	0.372	
poly(ReachCms, 3)3:WeightClassFlyweight	0.353	0.329	
poly(ReachCms, 3)1:WeightClassHeavyweight	0.375	0.375	
poly(ReachCms, 3)2:WeightClassHeavyweight	0.604	0.569	
poly(ReachCms, 3)3:WeightClassHeavyweight	0.447	0.419	

poly(ReachCms, 3)2:WeightClassLight Heavyweight	0.467	0.464
poly(ReachCms, 3)3:WeightClassLight Heavyweight	0.665	0.628
poly(ReachCms, 3)1:WeightClassLightweight	0.773	0.729
poly(ReachCms, 3)2:WeightClassLightweight	0.838	0.829
poly(ReachCms, 3)3:WeightClassLightweight	0.610	0.580
poly(ReachCms, 3)1:WeightClassMiddleweight	0.536	0.503
poly(ReachCms, 3)2:WeightClassMiddleweight	0.529	0.526
poly(ReachCms, 3)3:WeightClassMiddleweight	0.582	0.548
poly(ReachCms, 3)1:WeightClassWelterweight	0.760	0.715
poly(ReachCms, 3)2:WeightClassWelterweight	0.733	0.728
poly(ReachCms, 3)3:WeightClassWelterweight	0.700	0.662
poly(ReachCms, 3)1:WeightClassWomen's Bantamweight	0.325	0.298
poly(ReachCms, 3)2:WeightClassWomen's Bantamweight	0.318	0.306
poly(ReachCms, 3)3:WeightClassWomen's Bantamweight	0.451	0.420
poly(ReachCms, 3)1:WeightClassWomen's Featherweight	0.021	0.020
poly(ReachCms, 3)2:WeightClassWomen's Featherweight	0.024	0.025
poly(ReachCms, 3)3:WeightClassWomen's Featherweight	0.021	0.021
poly(ReachCms, 3)1:WeightClassWomen's Flyweight	0.228	0.230
poly(ReachCms, 3)2:WeightClassWomen's Flyweight	0.245	0.255
poly(ReachCms, 3)3:WeightClassWomen's Flyweight	0.423	0.408
poly(ReachCms, 3)1:WeightClassWomen's Strawweight	0.110	0.113
poly(ReachCms, 3)2:WeightClassWomen's Strawweight	0.146	0.155
poly(ReachCms, 3)3:WeightClassWomen's Strawweight	0.380	0.368
p(RC,3)3W		
poly(ReachCms, 3)1		
poly(ReachCms, 3)2		
poly(ReachCms, 3)3		
WeightClassCatch Weight		
WeightClassFeatherweight		
WeightClassFlyweight		
WeightClassHeavyweight		
WeightClassLight Heavyweight		
WeightClassLightweight		
WeightClassMiddleweight		
WeightClassWelterweight		
WeightClassWomen's Bantamweight		
WeightClassWomen's Featherweight		
WeightClassWomen's Flyweight		
WeightClassWomen's Strawweight		
poly(Height, 8)1		
poly(Height, 8)2		
poly(Height, 8)3		
poly(Height, 8)4		

```

poly(Height, 8)5
poly(Height, 8)6
poly(Height, 8)7
poly(Height, 8)8
WinStreak
poly(ReachCms, 3)1:WeightClassCatch Weight
poly(ReachCms, 3)2:WeightClassCatch Weight
poly(ReachCms, 3)3:WeightClassCatch Weight
poly(ReachCms, 3)1:WeightClassFeatherweight      0.626
poly(ReachCms, 3)2:WeightClassFeatherweight      0.645
poly(ReachCms, 3)3:WeightClassFeatherweight      0.597
poly(ReachCms, 3)1:WeightClassFlyweight         0.231
poly(ReachCms, 3)2:WeightClassFlyweight         0.234
poly(ReachCms, 3)3:WeightClassFlyweight         0.372
poly(ReachCms, 3)1:WeightClassHeavyweight       0.271
poly(ReachCms, 3)2:WeightClassHeavyweight       0.313
poly(ReachCms, 3)3:WeightClassHeavyweight       0.561
poly(ReachCms, 3)1:WeightClassLight Heavyweight 0.355
poly(ReachCms, 3)2:WeightClassLight Heavyweight 0.379
poly(ReachCms, 3)3:WeightClassLight Heavyweight 0.624
poly(ReachCms, 3)1:WeightClassLightweight        0.622
poly(ReachCms, 3)2:WeightClassLightweight        0.675
poly(ReachCms, 3)3:WeightClassLightweight        0.579
poly(ReachCms, 3)1:WeightClassMiddleweight       0.424
poly(ReachCms, 3)2:WeightClassMiddleweight       0.431
poly(ReachCms, 3)3:WeightClassMiddleweight       0.542
poly(ReachCms, 3)1:WeightClassWelterweight      0.610
poly(ReachCms, 3)2:WeightClassWelterweight      0.589
poly(ReachCms, 3)3:WeightClassWelterweight      0.659
poly(ReachCms, 3)1:WeightClassWomen's Bantamweight 0.259
poly(ReachCms, 3)2:WeightClassWomen's Bantamweight 0.254
poly(ReachCms, 3)3:WeightClassWomen's Bantamweight 0.425
poly(ReachCms, 3)1:WeightClassWomen's Featherweight 0.019
poly(ReachCms, 3)2:WeightClassWomen's Featherweight 0.022
poly(ReachCms, 3)3:WeightClassWomen's Featherweight 0.023
poly(ReachCms, 3)1:WeightClassWomen's Flyweight   0.196
poly(ReachCms, 3)2:WeightClassWomen's Flyweight   0.207
poly(ReachCms, 3)3:WeightClassWomen's Flyweight   0.405
poly(ReachCms, 3)1:WeightClassWomen's Strawweight  0.080
poly(ReachCms, 3)2:WeightClassWomen's Strawweight  0.109
poly(ReachCms, 3)3:WeightClassWomen's Strawweight  0.350
                                         ply(RchCms,3)1:WghtClssFt
poly(ReachCms, 3)1

```

poly(ReachCms, 3)2	
poly(ReachCms, 3)3	
WeightClassCatch Weight	
WeightClassFeatherweight	
WeightClassFlyweight	
WeightClassHeavyweight	
WeightClassLight Heavyweight	
WeightClassLightweight	
WeightClassMiddleweight	
WeightClassWelterweight	
WeightClassWomen's Bantamweight	
WeightClassWomen's Featherweight	
WeightClassWomen's Flyweight	
WeightClassWomen's Strawweight	
poly(Height, 8)1	
poly(Height, 8)2	
poly(Height, 8)3	
poly(Height, 8)4	
poly(Height, 8)5	
poly(Height, 8)6	
poly(Height, 8)7	
poly(Height, 8)8	
WinStreak	
poly(ReachCms, 3)1:WeightClassCatch Weight	
poly(ReachCms, 3)2:WeightClassCatch Weight	
poly(ReachCms, 3)3:WeightClassCatch Weight	
poly(ReachCms, 3)1:WeightClassFeatherweight	
poly(ReachCms, 3)2:WeightClassFeatherweight	0.895
poly(ReachCms, 3)3:WeightClassFeatherweight	0.913
poly(ReachCms, 3)1:WeightClassFlyweight	0.281
poly(ReachCms, 3)2:WeightClassFlyweight	0.284
poly(ReachCms, 3)3:WeightClassFlyweight	0.379
poly(ReachCms, 3)1:WeightClassHeavyweight	0.332
poly(ReachCms, 3)2:WeightClassHeavyweight	0.344
poly(ReachCms, 3)3:WeightClassHeavyweight	0.567
poly(ReachCms, 3)1:WeightClassLight Heavyweight	0.419
poly(ReachCms, 3)2:WeightClassLight Heavyweight	0.430
poly(ReachCms, 3)3:WeightClassLight Heavyweight	0.621
poly(ReachCms, 3)1:WeightClassLightweight	0.715
poly(ReachCms, 3)2:WeightClassLightweight	0.783
poly(ReachCms, 3)3:WeightClassLightweight	0.564
poly(ReachCms, 3)1:WeightClassMiddleweight	0.495
poly(ReachCms, 3)2:WeightClassMiddleweight	0.495

poly(ReachCms, 3)3:WeightClassMiddleweight	0.537
poly(ReachCms, 3)1:WeightClassWelterweight	0.707
poly(ReachCms, 3)2:WeightClassWelterweight	0.681
poly(ReachCms, 3)3:WeightClassWelterweight	0.653
poly(ReachCms, 3)1:WeightClassWomen's Bantamweight	0.298
poly(ReachCms, 3)2:WeightClassWomen's Bantamweight	0.292
poly(ReachCms, 3)3:WeightClassWomen's Bantamweight	0.416
poly(ReachCms, 3)1:WeightClassWomen's Featherweight	0.020
poly(ReachCms, 3)2:WeightClassWomen's Featherweight	0.024
poly(ReachCms, 3)3:WeightClassWomen's Featherweight	0.021
poly(ReachCms, 3)1:WeightClassWomen's Flyweight	0.221
poly(ReachCms, 3)2:WeightClassWomen's Flyweight	0.237
poly(ReachCms, 3)3:WeightClassWomen's Flyweight	0.399
poly(ReachCms, 3)1:WeightClassWomen's Strawweight	0.107
poly(ReachCms, 3)2:WeightClassWomen's Strawweight	0.141
poly(ReachCms, 3)3:WeightClassWomen's Strawweight	0.358
	ply(RchCms, 3)2:WghtClssFt
poly(ReachCms, 3)1	
poly(ReachCms, 3)2	
poly(ReachCms, 3)3	
WeightClassCatch Weight	
WeightClassFeatherweight	
WeightClassFlyweight	
WeightClassHeavyweight	
WeightClassLight Heavyweight	
WeightClassLightweight	
WeightClassMiddleweight	
WeightClassWelterweight	
WeightClassWomen's Bantamweight	
WeightClassWomen's Featherweight	
WeightClassWomen's Flyweight	
WeightClassWomen's Strawweight	
poly(Height, 8)1	
poly(Height, 8)2	
poly(Height, 8)3	
poly(Height, 8)4	
poly(Height, 8)5	
poly(Height, 8)6	
poly(Height, 8)7	
poly(Height, 8)8	
WinStreak	
poly(ReachCms, 3)1:WeightClassCatch Weight	
poly(ReachCms, 3)2:WeightClassCatch Weight	

poly(ReachCms, 3)3:WeightClassCatch Weight	
poly(ReachCms, 3)1:WeightClassFeatherweight	
poly(ReachCms, 3)2:WeightClassFeatherweight	
poly(ReachCms, 3)3:WeightClassFeatherweight	0.763
poly(ReachCms, 3)1:WeightClassFlyweight	0.287
poly(ReachCms, 3)2:WeightClassFlyweight	0.303
poly(ReachCms, 3)3:WeightClassFlyweight	0.391
poly(ReachCms, 3)1:WeightClassHeavyweight	0.342
poly(ReachCms, 3)2:WeightClassHeavyweight	0.369
poly(ReachCms, 3)3:WeightClassHeavyweight	0.584
poly(ReachCms, 3)1:WeightClassLight Heavyweight	0.431
poly(ReachCms, 3)2:WeightClassLight Heavyweight	0.461
poly(ReachCms, 3)3:WeightClassLight Heavyweight	0.640
poly(ReachCms, 3)1:WeightClassLightweight	0.733
poly(ReachCms, 3)2:WeightClassLightweight	0.842
poly(ReachCms, 3)3:WeightClassLightweight	0.579
poly(ReachCms, 3)1:WeightClassMiddleweight	0.508
poly(ReachCms, 3)2:WeightClassMiddleweight	0.532
poly(ReachCms, 3)3:WeightClassMiddleweight	0.552
poly(ReachCms, 3)1:WeightClassWelterweight	0.726
poly(ReachCms, 3)2:WeightClassWelterweight	0.733
poly(ReachCms, 3)3:WeightClassWelterweight	0.671
poly(ReachCms, 3)1:WeightClassWomen's Bantamweight	0.303
poly(ReachCms, 3)2:WeightClassWomen's Bantamweight	0.312
poly(ReachCms, 3)3:WeightClassWomen's Bantamweight	0.427
poly(ReachCms, 3)1:WeightClassWomen's Featherweight	0.021
poly(ReachCms, 3)2:WeightClassWomen's Featherweight	0.026
poly(ReachCms, 3)3:WeightClassWomen's Featherweight	0.022
poly(ReachCms, 3)1:WeightClassWomen's Flyweight	0.223
poly(ReachCms, 3)2:WeightClassWomen's Flyweight	0.250
poly(ReachCms, 3)3:WeightClassWomen's Flyweight	0.407
poly(ReachCms, 3)1:WeightClassWomen's Strawweight	0.110
poly(ReachCms, 3)2:WeightClassWomen's Strawweight	0.152
poly(ReachCms, 3)3:WeightClassWomen's Strawweight	0.368
	ply(RchCms,3)3:WghtClssFt
poly(ReachCms, 3)1	
poly(ReachCms, 3)2	
poly(ReachCms, 3)3	
WeightClassCatch Weight	
WeightClassFeatherweight	
WeightClassFlyweight	
WeightClassHeavyweight	
WeightClassLight Heavyweight	

WeightClassLightweight	
WeightClassMiddleweight	
WeightClassWelterweight	
WeightClassWomen's Bantamweight	
WeightClassWomen's Featherweight	
WeightClassWomen's Flyweight	
WeightClassWomen's Strawweight	
poly(Height, 8)1	
poly(Height, 8)2	
poly(Height, 8)3	
poly(Height, 8)4	
poly(Height, 8)5	
poly(Height, 8)6	
poly(Height, 8)7	
poly(Height, 8)8	
WinStreak	
poly(ReachCms, 3)1:WeightClassCatch Weight	
poly(ReachCms, 3)2:WeightClassCatch Weight	
poly(ReachCms, 3)3:WeightClassCatch Weight	
poly(ReachCms, 3)1:WeightClassFeatherweight	
poly(ReachCms, 3)2:WeightClassFeatherweight	
poly(ReachCms, 3)3:WeightClassFeatherweight	
poly(ReachCms, 3)1:WeightClassFlyweight	0.235
poly(ReachCms, 3)2:WeightClassFlyweight	0.238
poly(ReachCms, 3)3:WeightClassFlyweight	0.362
poly(ReachCms, 3)1:WeightClassHeavyweight	0.270
poly(ReachCms, 3)2:WeightClassHeavyweight	0.284
poly(ReachCms, 3)3:WeightClassHeavyweight	0.539
poly(ReachCms, 3)1:WeightClassLight Heavyweight	0.341
poly(ReachCms, 3)2:WeightClassLight Heavyweight	0.353
poly(ReachCms, 3)3:WeightClassLight Heavyweight	0.591
poly(ReachCms, 3)1:WeightClassLightweight	0.584
poly(ReachCms, 3)2:WeightClassLightweight	0.642
poly(ReachCms, 3)3:WeightClassLightweight	0.540
poly(ReachCms, 3)1:WeightClassMiddleweight	0.396
poly(ReachCms, 3)2:WeightClassMiddleweight	0.414
poly(ReachCms, 3)3:WeightClassMiddleweight	0.506
poly(ReachCms, 3)1:WeightClassWelterweight	0.578
poly(ReachCms, 3)2:WeightClassWelterweight	0.559
poly(ReachCms, 3)3:WeightClassWelterweight	0.623
poly(ReachCms, 3)1:WeightClassWomen's Bantamweight	0.242
poly(ReachCms, 3)2:WeightClassWomen's Bantamweight	0.237
poly(ReachCms, 3)3:WeightClassWomen's Bantamweight	0.394

poly(ReachCms, 3)1:WeightClassWomen's Featherweight	0.018
poly(ReachCms, 3)2:WeightClassWomen's Featherweight	0.021
poly(ReachCms, 3)3:WeightClassWomen's Featherweight	0.022
poly(ReachCms, 3)1:WeightClassWomen's Flyweight	0.181
poly(ReachCms, 3)2:WeightClassWomen's Flyweight	0.194
poly(ReachCms, 3)3:WeightClassWomen's Flyweight	0.380
poly(ReachCms, 3)1:WeightClassWomen's Strawweight	0.086
poly(ReachCms, 3)2:WeightClassWomen's Strawweight	0.115
poly(ReachCms, 3)3:WeightClassWomen's Strawweight	0.341
	ply(RchCms, 3)1:WghtClssFl
poly(ReachCms, 3)1	
poly(ReachCms, 3)2	
poly(ReachCms, 3)3	
WeightClassCatch Weight	
WeightClassFeatherweight	
WeightClassFlyweight	
WeightClassHeavyweight	
WeightClassLight Heavyweight	
WeightClassLightweight	
WeightClassMiddleweight	
WeightClassWelterweight	
WeightClassWomen's Bantamweight	
WeightClassWomen's Featherweight	
WeightClassWomen's Flyweight	
WeightClassWomen's Strawweight	
poly(Height, 8)1	
poly(Height, 8)2	
poly(Height, 8)3	
poly(Height, 8)4	
poly(Height, 8)5	
poly(Height, 8)6	
poly(Height, 8)7	
poly(Height, 8)8	
WinStreak	
poly(ReachCms, 3)1:WeightClassCatch Weight	
poly(ReachCms, 3)2:WeightClassCatch Weight	
poly(ReachCms, 3)3:WeightClassCatch Weight	
poly(ReachCms, 3)1:WeightClassFeatherweight	
poly(ReachCms, 3)2:WeightClassFeatherweight	
poly(ReachCms, 3)3:WeightClassFeatherweight	
poly(ReachCms, 3)1:WeightClassFlyweight	
poly(ReachCms, 3)2:WeightClassFlyweight	0.993
poly(ReachCms, 3)3:WeightClassFlyweight	0.935

poly(ReachCms, 3)1:WeightClassHeavyweight	0.115
poly(ReachCms, 3)2:WeightClassHeavyweight	0.131
poly(ReachCms, 3)3:WeightClassHeavyweight	0.198
poly(ReachCms, 3)1:WeightClassLight Heavyweight	0.164
poly(ReachCms, 3)2:WeightClassLight Heavyweight	0.144
poly(ReachCms, 3)3:WeightClassLight Heavyweight	0.233
poly(ReachCms, 3)1:WeightClassLightweight	0.259
poly(ReachCms, 3)2:WeightClassLightweight	0.282
poly(ReachCms, 3)3:WeightClassLightweight	0.203
poly(ReachCms, 3)1:WeightClassMiddleweight	0.180
poly(ReachCms, 3)2:WeightClassMiddleweight	0.179
poly(ReachCms, 3)3:WeightClassMiddleweight	0.193
poly(ReachCms, 3)1:WeightClassWelterweight	0.254
poly(ReachCms, 3)2:WeightClassWelterweight	0.249
poly(ReachCms, 3)3:WeightClassWelterweight	0.231
poly(ReachCms, 3)1:WeightClassWomen's Bantamweight	0.107
poly(ReachCms, 3)2:WeightClassWomen's Bantamweight	0.106
poly(ReachCms, 3)3:WeightClassWomen's Bantamweight	0.151
poly(ReachCms, 3)1:WeightClassWomen's Featherweight	0.005
poly(ReachCms, 3)2:WeightClassWomen's Featherweight	0.006
poly(ReachCms, 3)3:WeightClassWomen's Featherweight	0.006
poly(ReachCms, 3)1:WeightClassWomen's Flyweight	0.075
poly(ReachCms, 3)2:WeightClassWomen's Flyweight	0.081
poly(ReachCms, 3)3:WeightClassWomen's Flyweight	0.141
poly(ReachCms, 3)1:WeightClassWomen's Strawweight	0.030
poly(ReachCms, 3)2:WeightClassWomen's Strawweight	0.041
poly(ReachCms, 3)3:WeightClassWomen's Strawweight	0.120
	ply(RchCms,3)2:WghtClssFl
poly(ReachCms, 3)1	
poly(ReachCms, 3)2	
poly(ReachCms, 3)3	
WeightClassCatch Weight	
WeightClassFeatherweight	
WeightClassFlyweight	
WeightClassHeavyweight	
WeightClassLight Heavyweight	
WeightClassLightweight	
WeightClassMiddleweight	
WeightClassWelterweight	
WeightClassWomen's Bantamweight	
WeightClassWomen's Featherweight	
WeightClassWomen's Flyweight	
WeightClassWomen's Strawweight	

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poly(Height, 8)1
poly(Height, 8)2
poly(Height, 8)3
poly(Height, 8)4
poly(Height, 8)5
poly(Height, 8)6
poly(Height, 8)7
poly(Height, 8)8
WinStreak
poly(ReachCms, 3)1:WeightClassCatch Weight
poly(ReachCms, 3)2:WeightClassCatch Weight
poly(ReachCms, 3)3:WeightClassCatch Weight
poly(ReachCms, 3)1:WeightClassFeatherweight
poly(ReachCms, 3)2:WeightClassFeatherweight
poly(ReachCms, 3)3:WeightClassFeatherweight
poly(ReachCms, 3)1:WeightClassFlyweight
poly(ReachCms, 3)2:WeightClassFlyweight
poly(ReachCms, 3)3:WeightClassFlyweight      0.947
poly(ReachCms, 3)1:WeightClassHeavyweight   0.116
poly(ReachCms, 3)2:WeightClassHeavyweight   0.139
poly(ReachCms, 3)3:WeightClassHeavyweight   0.201
poly(ReachCms, 3)1:WeightClassLight Heavyweight 0.166
poly(ReachCms, 3)2:WeightClassLight Heavyweight 0.153
poly(ReachCms, 3)3:WeightClassLight Heavyweight 0.237
poly(ReachCms, 3)1:WeightClassLightweight    0.262
poly(ReachCms, 3)2:WeightClassLightweight    0.299
poly(ReachCms, 3)3:WeightClassLightweight    0.206
poly(ReachCms, 3)1:WeightClassMiddleweight   0.183
poly(ReachCms, 3)2:WeightClassMiddleweight   0.190
poly(ReachCms, 3)3:WeightClassMiddleweight   0.197
poly(ReachCms, 3)1:WeightClassWelterweight   0.258
poly(ReachCms, 3)2:WeightClassWelterweight   0.263
poly(ReachCms, 3)3:WeightClassWelterweight   0.236
poly(ReachCms, 3)1:WeightClassWomen's Bantamweight 0.109
poly(ReachCms, 3)2:WeightClassWomen's Bantamweight 0.112
poly(ReachCms, 3)3:WeightClassWomen's Bantamweight 0.154
poly(ReachCms, 3)1:WeightClassWomen's Featherweight 0.005
poly(ReachCms, 3)2:WeightClassWomen's Featherweight 0.007
poly(ReachCms, 3)3:WeightClassWomen's Featherweight 0.006
poly(ReachCms, 3)1:WeightClassWomen's Flyweight   0.076
poly(ReachCms, 3)2:WeightClassWomen's Flyweight   0.086
poly(ReachCms, 3)3:WeightClassWomen's Flyweight   0.143
poly(ReachCms, 3)1:WeightClassWomen's Strawweight 0.030

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poly(ReachCms, 3)2:WeightClassWomen's Strawweight	0.045
poly(ReachCms, 3)3:WeightClassWomen's Strawweight	0.123
	ply(RchCms,3)3:WghtClssFl
poly(ReachCms, 3)1	
poly(ReachCms, 3)2	
poly(ReachCms, 3)3	
WeightClassCatch Weight	
WeightClassFeatherweight	
WeightClassFlyweight	
WeightClassHeavyweight	
WeightClassLight Heavyweight	
WeightClassLightweight	
WeightClassMiddleweight	
WeightClassWelterweight	
WeightClassWomen's Bantamweight	
WeightClassWomen's Featherweight	
WeightClassWomen's Flyweight	
WeightClassWomen's Strawweight	
poly(Height, 8)1	
poly(Height, 8)2	
poly(Height, 8)3	
poly(Height, 8)4	
poly(Height, 8)5	
poly(Height, 8)6	
poly(Height, 8)7	
poly(Height, 8)8	
WinStreak	
poly(ReachCms, 3)1:WeightClassCatch Weight	
poly(ReachCms, 3)2:WeightClassCatch Weight	
poly(ReachCms, 3)3:WeightClassCatch Weight	
poly(ReachCms, 3)1:WeightClassFeatherweight	
poly(ReachCms, 3)2:WeightClassFeatherweight	
poly(ReachCms, 3)3:WeightClassFeatherweight	
poly(ReachCms, 3)1:WeightClassFlyweight	
poly(ReachCms, 3)2:WeightClassFlyweight	
poly(ReachCms, 3)3:WeightClassFlyweight	
poly(ReachCms, 3)1:WeightClassHeavyweight	0.162
poly(ReachCms, 3)2:WeightClassHeavyweight	0.180
poly(ReachCms, 3)3:WeightClassHeavyweight	0.326
poly(ReachCms, 3)1:WeightClassLight Heavyweight	0.224
poly(ReachCms, 3)2:WeightClassLight Heavyweight	0.205
poly(ReachCms, 3)3:WeightClassLight Heavyweight	0.375
poly(ReachCms, 3)1:WeightClassLightweight	0.361

poly(ReachCms, 3)2:WeightClassLightweight	0.393
poly(ReachCms, 3)3:WeightClassLightweight	0.331
poly(ReachCms, 3)1:WeightClassMiddleweight	0.250
poly(ReachCms, 3)2:WeightClassMiddleweight	0.250
poly(ReachCms, 3)3:WeightClassMiddleweight	0.315
poly(ReachCms, 3)1:WeightClassWelterweight	0.354
poly(ReachCms, 3)2:WeightClassWelterweight	0.346
poly(ReachCms, 3)3:WeightClassWelterweight	0.377
poly(ReachCms, 3)1:WeightClassWomen's Bantamweight	0.152
poly(ReachCms, 3)2:WeightClassWomen's Bantamweight	0.149
poly(ReachCms, 3)3:WeightClassWomen's Bantamweight	0.247
poly(ReachCms, 3)1:WeightClassWomen's Featherweight	0.010
poly(ReachCms, 3)2:WeightClassWomen's Featherweight	0.011
poly(ReachCms, 3)3:WeightClassWomen's Featherweight	0.013
poly(ReachCms, 3)1:WeightClassWomen's Flyweight	0.107
poly(ReachCms, 3)2:WeightClassWomen's Flyweight	0.115
poly(ReachCms, 3)3:WeightClassWomen's Flyweight	0.231
poly(ReachCms, 3)1:WeightClassWomen's Strawweight	0.042
poly(ReachCms, 3)2:WeightClassWomen's Strawweight	0.059
poly(ReachCms, 3)3:WeightClassWomen's Strawweight	0.200
	p(RC,3)1:WCH p(RC,3)2:WCH
poly(ReachCms, 3)1	
poly(ReachCms, 3)2	
poly(ReachCms, 3)3	
WeightClassCatch Weight	
WeightClassFeatherweight	
WeightClassFlyweight	
WeightClassHeavyweight	
WeightClassLight Heavyweight	
WeightClassLightweight	
WeightClassMiddleweight	
WeightClassWelterweight	
WeightClassWomen's Bantamweight	
WeightClassWomen's Featherweight	
WeightClassWomen's Flyweight	
WeightClassWomen's Strawweight	
poly(Height, 8)1	
poly(Height, 8)2	
poly(Height, 8)3	
poly(Height, 8)4	
poly(Height, 8)5	
poly(Height, 8)6	
poly(Height, 8)7	

```

poly(Height, 8)8
WinStreak
poly(ReachCms, 3)1:WeightClassCatch Weight
poly(ReachCms, 3)2:WeightClassCatch Weight
poly(ReachCms, 3)3:WeightClassCatch Weight
poly(ReachCms, 3)1:WeightClassFeatherweight
poly(ReachCms, 3)2:WeightClassFeatherweight
poly(ReachCms, 3)3:WeightClassFeatherweight
poly(ReachCms, 3)1:WeightClassFlyweight
poly(ReachCms, 3)2:WeightClassFlyweight
poly(ReachCms, 3)3:WeightClassFlyweight
poly(ReachCms, 3)1:WeightClassHeavyweight
poly(ReachCms, 3)2:WeightClassHeavyweight
poly(ReachCms, 3)3:WeightClassHeavyweight -0.675
poly(ReachCms, 3)1:WeightClassLight Heavyweight 0.869 -0.351
poly(ReachCms, 3)2:WeightClassLight Heavyweight 0.198 0.187
poly(ReachCms, 3)3:WeightClassLight Heavyweight 0.181 0.234
poly(ReachCms, 3)1:WeightClassLightweight 0.278 0.296
poly(ReachCms, 3)2:WeightClassLightweight 0.318 0.350
poly(ReachCms, 3)3:WeightClassLightweight 0.352 0.390
poly(ReachCms, 3)1:WeightClassMiddleweight 0.246 0.283
poly(ReachCms, 3)2:WeightClassMiddleweight 0.235 0.226
poly(ReachCms, 3)3:WeightClassMiddleweight 0.206 0.263
poly(ReachCms, 3)1:WeightClassMiddleweight 0.247 0.255
poly(ReachCms, 3)2:WeightClassWelterweight 0.317 0.340
poly(ReachCms, 3)3:WeightClassWelterweight 0.303 0.346
poly(ReachCms, 3)1:WeightClassWelterweight 0.287 0.320
poly(ReachCms, 3)2:WeightClassWomen's Bantamweight 0.130 0.146
poly(ReachCms, 3)3:WeightClassWomen's Bantamweight 0.127 0.150
poly(ReachCms, 3)1:WeightClassWomen's Bantamweight 0.182 0.205
poly(ReachCms, 3)2:WeightClassWomen's Featherweight 0.000 0.018
poly(ReachCms, 3)3:WeightClassWomen's Featherweight 0.001 0.021
poly(ReachCms, 3)1:WeightClassWomen's Featherweight 0.001 0.018
poly(ReachCms, 3)2:WeightClassWomen's Flyweight 0.095 0.109
poly(ReachCms, 3)3:WeightClassWomen's Flyweight 0.101 0.122
poly(ReachCms, 3)1:WeightClassWomen's Flyweight 0.172 0.197
poly(ReachCms, 3)2:WeightClassWomen's Strawweight 0.057 0.043
poly(ReachCms, 3)3:WeightClassWomen's Strawweight 0.073 0.062
poly(ReachCms, 3)1:WeightClassWomen's Strawweight 0.167 0.166
p(RC,3)3:WCH p(RC,3)1H

poly(ReachCms, 3)1
poly(ReachCms, 3)2
poly(ReachCms, 3)3
WeightClassCatch Weight

```

WeightClassFeatherweight		
WeightClassFlyweight		
WeightClassHeavyweight		
WeightClassLight Heavyweight		
WeightClassLightweight		
WeightClassMiddleweight		
WeightClassWelterweight		
WeightClassWomen's Bantamweight		
WeightClassWomen's Featherweight		
WeightClassWomen's Flyweight		
WeightClassWomen's Strawweight		
poly(Height, 8)1		
poly(Height, 8)2		
poly(Height, 8)3		
poly(Height, 8)4		
poly(Height, 8)5		
poly(Height, 8)6		
poly(Height, 8)7		
poly(Height, 8)8		
WinStreak		
poly(ReachCms, 3)1:WeightClassCatch Weight		
poly(ReachCms, 3)2:WeightClassCatch Weight		
poly(ReachCms, 3)3:WeightClassCatch Weight		
poly(ReachCms, 3)1:WeightClassFeatherweight		
poly(ReachCms, 3)2:WeightClassFeatherweight		
poly(ReachCms, 3)3:WeightClassFeatherweight		
poly(ReachCms, 3)1:WeightClassFlyweight		
poly(ReachCms, 3)2:WeightClassFlyweight		
poly(ReachCms, 3)3:WeightClassFlyweight		
poly(ReachCms, 3)1:WeightClassHeavyweight		
poly(ReachCms, 3)2:WeightClassHeavyweight		
poly(ReachCms, 3)3:WeightClassHeavyweight		
poly(ReachCms, 3)1:WeightClassLight Heavyweight	0.329	
poly(ReachCms, 3)2:WeightClassLight Heavyweight	0.324	-0.489
poly(ReachCms, 3)3:WeightClassLight Heavyweight	0.564	0.857
poly(ReachCms, 3)1:WeightClassLightweight	0.552	0.407
poly(ReachCms, 3)2:WeightClassLightweight	0.603	0.444
poly(ReachCms, 3)3:WeightClassLightweight	0.510	0.319
poly(ReachCms, 3)1:WeightClassMiddleweight	0.388	0.289
poly(ReachCms, 3)2:WeightClassMiddleweight	0.375	0.276
poly(ReachCms, 3)3:WeightClassMiddleweight	0.489	0.308
poly(ReachCms, 3)1:WeightClassWelterweight	0.545	0.406
poly(ReachCms, 3)2:WeightClassWelterweight	0.526	0.387

poly(ReachCms, 3)3:WeightClassWelterweight	0.586	0.371
poly(ReachCms, 3)1:WeightClassWomen's Bantamweight	0.230	0.163
poly(ReachCms, 3)2:WeightClassWomen's Bantamweight	0.225	0.157
poly(ReachCms, 3)3:WeightClassWomen's Bantamweight	0.374	0.230
poly(ReachCms, 3)1:WeightClassWomen's Featherweight	0.012	0.015
poly(ReachCms, 3)2:WeightClassWomen's Featherweight	0.014	0.017
poly(ReachCms, 3)3:WeightClassWomen's Featherweight	0.016	0.015
poly(ReachCms, 3)1:WeightClassWomen's Flyweight	0.165	0.124
poly(ReachCms, 3)2:WeightClassWomen's Flyweight	0.176	0.132
poly(ReachCms, 3)3:WeightClassWomen's Flyweight	0.353	0.225
poly(ReachCms, 3)1:WeightClassWomen's Strawweight	0.087	0.066
poly(ReachCms, 3)2:WeightClassWomen's Strawweight	0.114	0.085
poly(ReachCms, 3)3:WeightClassWomen's Strawweight	0.327	0.208
	p(RC,3)2H	p(RC,3)3H
poly(ReachCms, 3)1		
poly(ReachCms, 3)2		
poly(ReachCms, 3)3		
WeightClassCatch Weight		
WeightClassFeatherweight		
WeightClassFlyweight		
WeightClassHeavyweight		
WeightClassLight Heavyweight		
WeightClassLightweight		
WeightClassMiddleweight		
WeightClassWelterweight		
WeightClassWomen's Bantamweight		
WeightClassWomen's Featherweight		
WeightClassWomen's Flyweight		
WeightClassWomen's Strawweight		
poly(Height, 8)1		
poly(Height, 8)2		
poly(Height, 8)3		
poly(Height, 8)4		
poly(Height, 8)5		
poly(Height, 8)6		
poly(Height, 8)7		
poly(Height, 8)8		
WinStreak		
poly(ReachCms, 3)1:WeightClassCatch Weight		
poly(ReachCms, 3)2:WeightClassCatch Weight		
poly(ReachCms, 3)3:WeightClassCatch Weight		
poly(ReachCms, 3)1:WeightClassFeatherweight		
poly(ReachCms, 3)2:WeightClassFeatherweight		

poly(ReachCms, 3)3:WeightClassFeatherweight		
poly(ReachCms, 3)1:WeightClassFlyweight		
poly(ReachCms, 3)2:WeightClassFlyweight		
poly(ReachCms, 3)3:WeightClassFlyweight		
poly(ReachCms, 3)1:WeightClassHeavyweight		
poly(ReachCms, 3)2:WeightClassHeavyweight		
poly(ReachCms, 3)3:WeightClassHeavyweight		
poly(ReachCms, 3)1:WeightClassLight Heavyweight	-0.143	
poly(ReachCms, 3)2:WeightClassLight Heavyweight		
poly(ReachCms, 3)3:WeightClassLight Heavyweight		
poly(ReachCms, 3)1:WeightClassLightweight	0.431	0.610
poly(ReachCms, 3)2:WeightClassLightweight	0.487	0.662
poly(ReachCms, 3)3:WeightClassLightweight	0.347	0.564
poly(ReachCms, 3)1:WeightClassMiddleweight	0.290	0.423
poly(ReachCms, 3)2:WeightClassMiddleweight	0.315	0.420
poly(ReachCms, 3)3:WeightClassMiddleweight	0.321	0.537
poly(ReachCms, 3)1:WeightClassWelterweight	0.418	0.602
poly(ReachCms, 3)2:WeightClassWelterweight	0.427	0.581
poly(ReachCms, 3)3:WeightClassWelterweight	0.392	0.648
poly(ReachCms, 3)1:WeightClassWomen's Bantamweight	0.181	0.255
poly(ReachCms, 3)2:WeightClassWomen's Bantamweight	0.187	0.248
poly(ReachCms, 3)3:WeightClassWomen's Bantamweight	0.254	0.414
poly(ReachCms, 3)1:WeightClassWomen's Featherweight	0.007	0.022
poly(ReachCms, 3)2:WeightClassWomen's Featherweight	0.010	0.025
poly(ReachCms, 3)3:WeightClassWomen's Featherweight	0.008	0.026
poly(ReachCms, 3)1:WeightClassWomen's Flyweight	0.132	0.185
poly(ReachCms, 3)2:WeightClassWomen's Flyweight	0.148	0.197
poly(ReachCms, 3)3:WeightClassWomen's Flyweight	0.239	0.393
poly(ReachCms, 3)1:WeightClassWomen's Strawweight	0.058	0.092
poly(ReachCms, 3)2:WeightClassWomen's Strawweight	0.083	0.121
poly(ReachCms, 3)3:WeightClassWomen's Strawweight	0.210	0.358
p(RC,3)1:WCL p(RC,3)2:WCL		
poly(ReachCms, 3)1		
poly(ReachCms, 3)2		
poly(ReachCms, 3)3		
WeightClassCatch Weight		
WeightClassFeatherweight		
WeightClassFlyweight		
WeightClassHeavyweight		
WeightClassLight Heavyweight		
WeightClassLightweight		
WeightClassMiddleweight		
WeightClassWelterweight		

WeightClassWomen's Bantamweight		
WeightClassWomen's Featherweight		
WeightClassWomen's Flyweight		
WeightClassWomen's Strawweight		
poly(Height, 8)1		
poly(Height, 8)2		
poly(Height, 8)3		
poly(Height, 8)4		
poly(Height, 8)5		
poly(Height, 8)6		
poly(Height, 8)7		
poly(Height, 8)8		
WinStreak		
poly(ReachCms, 3)1:WeightClassCatch Weight		
poly(ReachCms, 3)2:WeightClassCatch Weight		
poly(ReachCms, 3)3:WeightClassCatch Weight		
poly(ReachCms, 3)1:WeightClassFeatherweight		
poly(ReachCms, 3)2:WeightClassFeatherweight		
poly(ReachCms, 3)3:WeightClassFeatherweight		
poly(ReachCms, 3)1:WeightClassFlyweight		
poly(ReachCms, 3)2:WeightClassFlyweight		
poly(ReachCms, 3)3:WeightClassFlyweight		
poly(ReachCms, 3)1:WeightClassHeavyweight		
poly(ReachCms, 3)2:WeightClassHeavyweight		
poly(ReachCms, 3)3:WeightClassHeavyweight		
poly(ReachCms, 3)1:WeightClassLight Heavyweight		
poly(ReachCms, 3)2:WeightClassLight Heavyweight		
poly(ReachCms, 3)3:WeightClassLight Heavyweight		
poly(ReachCms, 3)1:WeightClassLightweight	0.752	
poly(ReachCms, 3)2:WeightClassLightweight	0.922	0.600
poly(ReachCms, 3)1:WeightClassMiddleweight	0.489	0.527
poly(ReachCms, 3)2:WeightClassMiddleweight	0.489	0.558
poly(ReachCms, 3)3:WeightClassMiddleweight	0.533	0.575
poly(ReachCms, 3)1:WeightClassWelterweight	0.699	0.754
poly(ReachCms, 3)2:WeightClassWelterweight	0.671	0.768
poly(ReachCms, 3)3:WeightClassWelterweight	0.648	0.696
poly(ReachCms, 3)1:WeightClassWomen's Bantamweight	0.298	0.317
poly(ReachCms, 3)2:WeightClassWomen's Bantamweight	0.291	0.325
poly(ReachCms, 3)3:WeightClassWomen's Bantamweight	0.415	0.446
poly(ReachCms, 3)1:WeightClassWomen's Featherweight	0.020	0.019
poly(ReachCms, 3)2:WeightClassWomen's Featherweight	0.023	0.024
poly(ReachCms, 3)3:WeightClassWomen's Featherweight	0.020	0.019

poly(ReachCms, 3)1:WeightClassWomen's Flyweight	0.219	0.234
poly(ReachCms, 3)2:WeightClassWomen's Flyweight	0.233	0.260
poly(ReachCms, 3)3:WeightClassWomen's Flyweight	0.394	0.423
poly(ReachCms, 3)1:WeightClassWomen's Strawweight	0.104	0.117
poly(ReachCms, 3)2:WeightClassWomen's Strawweight	0.138	0.161
poly(ReachCms, 3)3:WeightClassWomen's Strawweight	0.354	0.385
	p(RC,3)3:WCL	p(RC,3)1:WCM
poly(ReachCms, 3)1		
poly(ReachCms, 3)2		
poly(ReachCms, 3)3		
WeightClassCatch Weight		
WeightClassFeatherweight		
WeightClassFlyweight		
WeightClassHeavyweight		
WeightClassLight Heavyweight		
WeightClassLightweight		
WeightClassMiddleweight		
WeightClassWelterweight		
WeightClassWomen's Bantamweight		
WeightClassWomen's Featherweight		
WeightClassWomen's Flyweight		
WeightClassWomen's Strawweight		
poly(Height, 8)1		
poly(Height, 8)2		
poly(Height, 8)3		
poly(Height, 8)4		
poly(Height, 8)5		
poly(Height, 8)6		
poly(Height, 8)7		
poly(Height, 8)8		
WinStreak		
poly(ReachCms, 3)1:WeightClassCatch Weight		
poly(ReachCms, 3)2:WeightClassCatch Weight		
poly(ReachCms, 3)3:WeightClassCatch Weight		
poly(ReachCms, 3)1:WeightClassFeatherweight		
poly(ReachCms, 3)2:WeightClassFeatherweight		
poly(ReachCms, 3)3:WeightClassFeatherweight		
poly(ReachCms, 3)1:WeightClassFlyweight		
poly(ReachCms, 3)2:WeightClassFlyweight		
poly(ReachCms, 3)3:WeightClassFlyweight		
poly(ReachCms, 3)1:WeightClassHeavyweight		
poly(ReachCms, 3)2:WeightClassHeavyweight		
poly(ReachCms, 3)3:WeightClassHeavyweight		

poly(ReachCms, 3)1:WeightClassLight Heavyweight		
poly(ReachCms, 3)2:WeightClassLight Heavyweight		
poly(ReachCms, 3)3:WeightClassLight Heavyweight		
poly(ReachCms, 3)1:WeightClassLightweight		
poly(ReachCms, 3)2:WeightClassLightweight		
poly(ReachCms, 3)3:WeightClassLightweight		
poly(ReachCms, 3)1:WeightClassMiddleweight	0.383	
poly(ReachCms, 3)2:WeightClassMiddleweight	0.393	-0.313
poly(ReachCms, 3)3:WeightClassMiddleweight	0.492	0.928
poly(ReachCms, 3)1:WeightClassWelterweight	0.553	0.485
poly(ReachCms, 3)2:WeightClassWelterweight	0.533	0.460
poly(ReachCms, 3)3:WeightClassWelterweight	0.602	0.445
poly(ReachCms, 3)1:WeightClassWomen's Bantamweight	0.238	0.209
poly(ReachCms, 3)2:WeightClassWomen's Bantamweight	0.233	0.203
poly(ReachCms, 3)3:WeightClassWomen's Bantamweight	0.386	0.287
poly(ReachCms, 3)1:WeightClassWomen's Featherweight	0.018	0.021
poly(ReachCms, 3)2:WeightClassWomen's Featherweight	0.020	0.023
poly(ReachCms, 3)3:WeightClassWomen's Featherweight	0.022	0.021
poly(ReachCms, 3)1:WeightClassWomen's Flyweight	0.171	0.146
poly(ReachCms, 3)2:WeightClassWomen's Flyweight	0.183	0.156
poly(ReachCms, 3)3:WeightClassWomen's Flyweight	0.362	0.267
poly(ReachCms, 3)1:WeightClassWomen's Strawweight	0.083	0.072
poly(ReachCms, 3)2:WeightClassWomen's Strawweight	0.110	0.096
poly(ReachCms, 3)3:WeightClassWomen's Strawweight	0.329	0.243
	p(RC,3)2:WCM	p(RC,3)3:WCM
poly(ReachCms, 3)1		
poly(ReachCms, 3)2		
poly(ReachCms, 3)3		
WeightClassCatch Weight		
WeightClassFeatherweight		
WeightClassFlyweight		
WeightClassHeavyweight		
WeightClassLight Heavyweight		
WeightClassLightweight		
WeightClassMiddleweight		
WeightClassWelterweight		
WeightClassWomen's Bantamweight		
WeightClassWomen's Featherweight		
WeightClassWomen's Flyweight		
WeightClassWomen's Strawweight		
poly(Height, 8)1		
poly(Height, 8)2		
poly(Height, 8)3		

poly(Height, 8)4		
poly(Height, 8)5		
poly(Height, 8)6		
poly(Height, 8)7		
poly(Height, 8)8		
WinStreak		
poly(ReachCms, 3)1:WeightClassCatch Weight	-0.192	
poly(ReachCms, 3)2:WeightClassCatch Weight	0.475	0.526
poly(ReachCms, 3)3:WeightClassCatch Weight	0.490	0.503
poly(ReachCms, 3)1:WeightClassFeatherweight	0.443	0.566
poly(ReachCms, 3)2:WeightClassFeatherweight	0.195	0.227
poly(ReachCms, 3)3:WeightClassFeatherweight	0.202	0.221
poly(ReachCms, 3)1:WeightClassFlyweight	0.280	0.364
poly(ReachCms, 3)2:WeightClassFlyweight	0.005	0.025
poly(ReachCms, 3)3:WeightClassFlyweight	0.008	0.028
poly(ReachCms, 3)1:WeightClassHeavyweight	0.006	0.028
poly(ReachCms, 3)2:WeightClassHeavyweight	0.152	0.158
poly(ReachCms, 3)3:WeightClassHeavyweight	0.169	0.169
poly(ReachCms, 3)1:WeightClassLight Heavyweight	0.273	0.339
poly(ReachCms, 3)2:WeightClassLight Heavyweight	0.073	0.079
poly(ReachCms, 3)3:WeightClassLight Heavyweight	0.101	0.105
poly(ReachCms, 3)1:WeightClassLightweight	0.245	0.310
poly(ReachCms, 3)2:WeightClassLightweight	p(RC,3)1:WCW	p(RC,3)2:WCW
poly(ReachCms, 3)3:WeightClassLightweight		
poly(ReachCms, 3)1:WeightClassMiddleweight		
poly(ReachCms, 3)2:WeightClassMiddleweight		
poly(ReachCms, 3)3:WeightClassMiddleweight		
poly(ReachCms, 3)1:WeightClassWelterweight		
poly(ReachCms, 3)2:WeightClassWelterweight		
poly(ReachCms, 3)3:WeightClassWelterweight		
poly(ReachCms, 3)1:WeightClassWomen's Bantamweight		
poly(ReachCms, 3)2:WeightClassWomen's Bantamweight		
poly(ReachCms, 3)3:WeightClassWomen's Bantamweight		
poly(ReachCms, 3)1:WeightClassWomen's Featherweight		
poly(ReachCms, 3)2:WeightClassWomen's Featherweight		
poly(ReachCms, 3)3:WeightClassWomen's Featherweight		
poly(ReachCms, 3)1:WeightClassWomen's Flyweight		
poly(ReachCms, 3)2:WeightClassWomen's Flyweight		
poly(ReachCms, 3)3:WeightClassWomen's Flyweight		
poly(ReachCms, 3)1:WeightClassWomen's Strawweight		
poly(ReachCms, 3)2:WeightClassWomen's Strawweight		
poly(ReachCms, 3)3:WeightClassWomen's Strawweight		

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poly(ReachCms, 3)1
poly(ReachCms, 3)2
poly(ReachCms, 3)3
WeightClassCatch Weight
WeightClassFeatherweight
WeightClassFlyweight
WeightClassHeavyweight
WeightClassLight Heavyweight
WeightClassLightweight
WeightClassMiddleweight
WeightClassWelterweight
WeightClassWomen's Bantamweight
WeightClassWomen's Featherweight
WeightClassWomen's Flyweight
WeightClassWomen's Strawweight
poly(Height, 8)1
poly(Height, 8)2
poly(Height, 8)3
poly(Height, 8)4
poly(Height, 8)5
poly(Height, 8)6
poly(Height, 8)7
poly(Height, 8)8
WinStreak
poly(ReachCms, 3)1:WeightClassCatch Weight
poly(ReachCms, 3)2:WeightClassCatch Weight
poly(ReachCms, 3)3:WeightClassCatch Weight
poly(ReachCms, 3)1:WeightClassFeatherweight
poly(ReachCms, 3)2:WeightClassFeatherweight
poly(ReachCms, 3)3:WeightClassFeatherweight
poly(ReachCms, 3)1:WeightClassFlyweight
poly(ReachCms, 3)2:WeightClassFlyweight
poly(ReachCms, 3)3:WeightClassFlyweight
poly(ReachCms, 3)1:WeightClassHeavyweight
poly(ReachCms, 3)2:WeightClassHeavyweight
poly(ReachCms, 3)3:WeightClassHeavyweight
poly(ReachCms, 3)1:WeightClassLight Heavyweight
poly(ReachCms, 3)2:WeightClassLight Heavyweight
poly(ReachCms, 3)3:WeightClassLight Heavyweight
poly(ReachCms, 3)1:WeightClassLightweight
poly(ReachCms, 3)2:WeightClassLightweight
poly(ReachCms, 3)3:WeightClassLightweight
poly(ReachCms, 3)1:WeightClassMiddleweight
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poly(ReachCms, 3)2:WeightClassMiddleweight		
poly(ReachCms, 3)3:WeightClassMiddleweight		
poly(ReachCms, 3)1:WeightClassWelterweight		
poly(ReachCms, 3)2:WeightClassWelterweight	0.352	
poly(ReachCms, 3)3:WeightClassWelterweight	0.923	0.325
poly(ReachCms, 3)1:WeightClassWomen's Bantamweight	0.291	0.278
poly(ReachCms, 3)2:WeightClassWomen's Bantamweight	0.284	0.285
poly(ReachCms, 3)3:WeightClassWomen's Bantamweight	0.405	0.390
poly(ReachCms, 3)1:WeightClassWomen's Featherweight	0.021	0.016
poly(ReachCms, 3)2:WeightClassWomen's Featherweight	0.025	0.020
poly(ReachCms, 3)3:WeightClassWomen's Featherweight	0.022	0.016
poly(ReachCms, 3)1:WeightClassWomen's Flyweight	0.211	0.207
poly(ReachCms, 3)2:WeightClassWomen's Flyweight	0.225	0.231
poly(ReachCms, 3)3:WeightClassWomen's Flyweight	0.385	0.373
poly(ReachCms, 3)1:WeightClassWomen's Strawweight	0.101	0.102
poly(ReachCms, 3)2:WeightClassWomen's Strawweight	0.134	0.140
poly(ReachCms, 3)3:WeightClassWomen's Strawweight	0.346	0.336
	p(RC,3)3:WCW	p(RC,3)1B
poly(ReachCms, 3)1		
poly(ReachCms, 3)2		
poly(ReachCms, 3)3		
WeightClassCatch Weight		
WeightClassFeatherweight		
WeightClassFlyweight		
WeightClassHeavyweight		
WeightClassLight Heavyweight		
WeightClassLightweight		
WeightClassMiddleweight		
WeightClassWelterweight		
WeightClassWomen's Bantamweight		
WeightClassWomen's Featherweight		
WeightClassWomen's Flyweight		
WeightClassWomen's Strawweight		
poly(Height, 8)1		
poly(Height, 8)2		
poly(Height, 8)3		
poly(Height, 8)4		
poly(Height, 8)5		
poly(Height, 8)6		
poly(Height, 8)7		
poly(Height, 8)8		
WinStreak		
poly(ReachCms, 3)1:WeightClassCatch Weight		

poly(ReachCms, 3)2:WeightClassCatch Weight		
poly(ReachCms, 3)3:WeightClassCatch Weight		
poly(ReachCms, 3)1:WeightClassFeatherweight		
poly(ReachCms, 3)2:WeightClassFeatherweight		
poly(ReachCms, 3)3:WeightClassFeatherweight		
poly(ReachCms, 3)1:WeightClassFlyweight		
poly(ReachCms, 3)2:WeightClassFlyweight		
poly(ReachCms, 3)3:WeightClassFlyweight		
poly(ReachCms, 3)1:WeightClassHeavyweight		
poly(ReachCms, 3)2:WeightClassHeavyweight		
poly(ReachCms, 3)3:WeightClassHeavyweight		
poly(ReachCms, 3)1:WeightClassLight Heavyweight		
poly(ReachCms, 3)2:WeightClassLight Heavyweight		
poly(ReachCms, 3)3:WeightClassLight Heavyweight		
poly(ReachCms, 3)1:WeightClassLightweight		
poly(ReachCms, 3)2:WeightClassLightweight		
poly(ReachCms, 3)3:WeightClassLightweight		
poly(ReachCms, 3)1:WeightClassMiddleweight		
poly(ReachCms, 3)2:WeightClassMiddleweight		
poly(ReachCms, 3)3:WeightClassMiddleweight		
poly(ReachCms, 3)1:WeightClassWelterweight		
poly(ReachCms, 3)2:WeightClassWelterweight		
poly(ReachCms, 3)3:WeightClassWelterweight		
poly(ReachCms, 3)1:WeightClassWomen's Bantamweight	0.268	
poly(ReachCms, 3)2:WeightClassWomen's Bantamweight	0.262	0.984
poly(ReachCms, 3)3:WeightClassWomen's Bantamweight	0.436	0.908
poly(ReachCms, 3)1:WeightClassWomen's Featherweight	0.022	0.006
poly(ReachCms, 3)2:WeightClassWomen's Featherweight	0.026	0.007
poly(ReachCms, 3)3:WeightClassWomen's Featherweight	0.027	0.006
poly(ReachCms, 3)1:WeightClassWomen's Flyweight	0.194	0.088
poly(ReachCms, 3)2:WeightClassWomen's Flyweight	0.207	0.093
poly(ReachCms, 3)3:WeightClassWomen's Flyweight	0.413	0.165
poly(ReachCms, 3)1:WeightClassWomen's Strawweight	0.096	0.019
poly(ReachCms, 3)2:WeightClassWomen's Strawweight	0.127	0.032
poly(ReachCms, 3)3:WeightClassWomen's Strawweight	0.376	0.125
	p(RC,3)2B	p(RC,3)3B
poly(ReachCms, 3)1		
poly(ReachCms, 3)2		
poly(ReachCms, 3)3		
WeightClassCatch Weight		
WeightClassFeatherweight		
WeightClassFlyweight		
WeightClassHeavyweight		

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WeightClassLight Heavyweight
WeightClassLightweight
WeightClassMiddleweight
WeightClassWelterweight
WeightClassWomen's Bantamweight
WeightClassWomen's Featherweight
WeightClassWomen's Flyweight
WeightClassWomen's Strawweight
poly(Height, 8)1
poly(Height, 8)2
poly(Height, 8)3
poly(Height, 8)4
poly(Height, 8)5
poly(Height, 8)6
poly(Height, 8)7
poly(Height, 8)8
WinStreak
poly(ReachCms, 3)1:WeightClassCatch Weight
poly(ReachCms, 3)2:WeightClassCatch Weight
poly(ReachCms, 3)3:WeightClassCatch Weight
poly(ReachCms, 3)1:WeightClassFeatherweight
poly(ReachCms, 3)2:WeightClassFeatherweight
poly(ReachCms, 3)3:WeightClassFeatherweight
poly(ReachCms, 3)1:WeightClassFlyweight
poly(ReachCms, 3)2:WeightClassFlyweight
poly(ReachCms, 3)3:WeightClassFlyweight
poly(ReachCms, 3)1:WeightClassHeavyweight
poly(ReachCms, 3)2:WeightClassHeavyweight
poly(ReachCms, 3)3:WeightClassHeavyweight
poly(ReachCms, 3)1:WeightClassLight Heavyweight
poly(ReachCms, 3)2:WeightClassLight Heavyweight
poly(ReachCms, 3)3:WeightClassLight Heavyweight
poly(ReachCms, 3)1:WeightClassLightweight
poly(ReachCms, 3)2:WeightClassLightweight
poly(ReachCms, 3)3:WeightClassLightweight
poly(ReachCms, 3)1:WeightClassMiddleweight
poly(ReachCms, 3)2:WeightClassMiddleweight
poly(ReachCms, 3)3:WeightClassMiddleweight
poly(ReachCms, 3)1:WeightClassWelterweight
poly(ReachCms, 3)2:WeightClassWelterweight
poly(ReachCms, 3)3:WeightClassWelterweight
poly(ReachCms, 3)1:WeightClassWomen's Bantamweight
poly(ReachCms, 3)2:WeightClassWomen's Bantamweight
```

poly(ReachCms, 3)3:WeightClassWomen's Bantamweight	0.931	
poly(ReachCms, 3)1:WeightClassWomen's Featherweight	0.005	0.010
poly(ReachCms, 3)2:WeightClassWomen's Featherweight	0.007	0.012
poly(ReachCms, 3)3:WeightClassWomen's Featherweight	0.005	0.013
poly(ReachCms, 3)1:WeightClassWomen's Flyweight	0.085	0.125
poly(ReachCms, 3)2:WeightClassWomen's Flyweight	0.096	0.133
poly(ReachCms, 3)3:WeightClassWomen's Flyweight	0.161	0.269
poly(ReachCms, 3)1:WeightClassWomen's Strawweight	0.018	0.027
poly(ReachCms, 3)2:WeightClassWomen's Strawweight	0.034	0.044
poly(ReachCms, 3)3:WeightClassWomen's Strawweight	0.122	0.208
	ply(RchCms, 3)1:WghtClssWmn'sFt	
poly(ReachCms, 3)1		
poly(ReachCms, 3)2		
poly(ReachCms, 3)3		
WeightClassCatch Weight		
WeightClassFeatherweight		
WeightClassFlyweight		
WeightClassHeavyweight		
WeightClassLight Heavyweight		
WeightClassLightweight		
WeightClassMiddleweight		
WeightClassWelterweight		
WeightClassWomen's Bantamweight		
WeightClassWomen's Featherweight		
WeightClassWomen's Flyweight		
WeightClassWomen's Strawweight		
poly(Height, 8)1		
poly(Height, 8)2		
poly(Height, 8)3		
poly(Height, 8)4		
poly(Height, 8)5		
poly(Height, 8)6		
poly(Height, 8)7		
poly(Height, 8)8		
WinStreak		
poly(ReachCms, 3)1:WeightClassCatch Weight		
poly(ReachCms, 3)2:WeightClassCatch Weight		
poly(ReachCms, 3)3:WeightClassCatch Weight		
poly(ReachCms, 3)1:WeightClassFeatherweight		
poly(ReachCms, 3)2:WeightClassFeatherweight		
poly(ReachCms, 3)3:WeightClassFeatherweight		
poly(ReachCms, 3)1:WeightClassFlyweight		
poly(ReachCms, 3)2:WeightClassFlyweight		

```

poly(ReachCms, 3)3:WeightClassFlyweight
poly(ReachCms, 3)1:WeightClassHeavyweight
poly(ReachCms, 3)2:WeightClassHeavyweight
poly(ReachCms, 3)3:WeightClassHeavyweight
poly(ReachCms, 3)1:WeightClassLight Heavyweight
poly(ReachCms, 3)2:WeightClassLight Heavyweight
poly(ReachCms, 3)3:WeightClassLight Heavyweight
poly(ReachCms, 3)1:WeightClassLightweight
poly(ReachCms, 3)2:WeightClassLightweight
poly(ReachCms, 3)3:WeightClassLightweight
poly(ReachCms, 3)1:WeightClassMiddleweight
poly(ReachCms, 3)2:WeightClassMiddleweight
poly(ReachCms, 3)3:WeightClassMiddleweight
poly(ReachCms, 3)1:WeightClassWelterweight
poly(ReachCms, 3)2:WeightClassWelterweight
poly(ReachCms, 3)3:WeightClassWelterweight
poly(ReachCms, 3)1:WeightClassWomen's Bantamweight
poly(ReachCms, 3)2:WeightClassWomen's Bantamweight
poly(ReachCms, 3)3:WeightClassWomen's Bantamweight
poly(ReachCms, 3)1:WeightClassWomen's Featherweight
poly(ReachCms, 3)2:WeightClassWomen's Featherweight 0.997
poly(ReachCms, 3)3:WeightClassWomen's Featherweight 0.993
poly(ReachCms, 3)1:WeightClassWomen's Flyweight 0.018
poly(ReachCms, 3)2:WeightClassWomen's Flyweight 0.017
poly(ReachCms, 3)3:WeightClassWomen's Flyweight 0.021
poly(ReachCms, 3)1:WeightClassWomen's Strawweight 0.014
poly(ReachCms, 3)2:WeightClassWomen's Strawweight 0.016
poly(ReachCms, 3)3:WeightClassWomen's Strawweight 0.023
                                         ply(RchCms,3)2:WghtClssWmn'sFt

poly(ReachCms, 3)1
poly(ReachCms, 3)2
poly(ReachCms, 3)3
WeightClassCatch Weight
WeightClassFeatherweight
WeightClassFlyweight
WeightClassHeavyweight
WeightClassLight Heavyweight
WeightClassLightweight
WeightClassMiddleweight
WeightClassWelterweight
WeightClassWomen's Bantamweight
WeightClassWomen's Featherweight
WeightClassWomen's Flyweight

```

```

WeightClassWomen's Strawweight
poly(Height, 8)1
poly(Height, 8)2
poly(Height, 8)3
poly(Height, 8)4
poly(Height, 8)5
poly(Height, 8)6
poly(Height, 8)7
poly(Height, 8)8
WinStreak
poly(ReachCms, 3)1:WeightClassCatch Weight
poly(ReachCms, 3)2:WeightClassCatch Weight
poly(ReachCms, 3)3:WeightClassCatch Weight
poly(ReachCms, 3)1:WeightClassFeatherweight
poly(ReachCms, 3)2:WeightClassFeatherweight
poly(ReachCms, 3)3:WeightClassFeatherweight
poly(ReachCms, 3)1:WeightClassFlyweight
poly(ReachCms, 3)2:WeightClassFlyweight
poly(ReachCms, 3)3:WeightClassFlyweight
poly(ReachCms, 3)1:WeightClassHeavyweight
poly(ReachCms, 3)2:WeightClassHeavyweight
poly(ReachCms, 3)3:WeightClassHeavyweight
poly(ReachCms, 3)1:WeightClassLight Heavyweight
poly(ReachCms, 3)2:WeightClassLight Heavyweight
poly(ReachCms, 3)3:WeightClassLight Heavyweight
poly(ReachCms, 3)1:WeightClassLightweight
poly(ReachCms, 3)2:WeightClassLightweight
poly(ReachCms, 3)3:WeightClassLightweight
poly(ReachCms, 3)1:WeightClassMiddleweight
poly(ReachCms, 3)2:WeightClassMiddleweight
poly(ReachCms, 3)3:WeightClassMiddleweight
poly(ReachCms, 3)1:WeightClassWelterweight
poly(ReachCms, 3)2:WeightClassWelterweight
poly(ReachCms, 3)3:WeightClassWelterweight
poly(ReachCms, 3)1:WeightClassWomen's Bantamweight
poly(ReachCms, 3)2:WeightClassWomen's Bantamweight
poly(ReachCms, 3)3:WeightClassWomen's Bantamweight
poly(ReachCms, 3)1:WeightClassWomen's Featherweight
poly(ReachCms, 3)2:WeightClassWomen's Featherweight
poly(ReachCms, 3)3:WeightClassWomen's Featherweight 0.983
poly(ReachCms, 3)1:WeightClassWomen's Flyweight 0.019
poly(ReachCms, 3)2:WeightClassWomen's Flyweight 0.019
poly(ReachCms, 3)3:WeightClassWomen's Flyweight 0.023

```

poly(ReachCms, 3)1:WeightClassWomen's Strawweight	0.015
poly(ReachCms, 3)2:WeightClassWomen's Strawweight	0.017
poly(ReachCms, 3)3:WeightClassWomen's Strawweight	0.025
	ply(RchCms, 3)3:WghtClssWmn'sFt
poly(ReachCms, 3)1	
poly(ReachCms, 3)2	
poly(ReachCms, 3)3	
WeightClassCatch Weight	
WeightClassFeatherweight	
WeightClassFlyweight	
WeightClassHeavyweight	
WeightClassLight Heavyweight	
WeightClassLightweight	
WeightClassMiddleweight	
WeightClassWelterweight	
WeightClassWomen's Bantamweight	
WeightClassWomen's Featherweight	
WeightClassWomen's Flyweight	
WeightClassWomen's Strawweight	
poly(Height, 8)1	
poly(Height, 8)2	
poly(Height, 8)3	
poly(Height, 8)4	
poly(Height, 8)5	
poly(Height, 8)6	
poly(Height, 8)7	
poly(Height, 8)8	
WinStreak	
poly(ReachCms, 3)1:WeightClassCatch Weight	
poly(ReachCms, 3)2:WeightClassCatch Weight	
poly(ReachCms, 3)3:WeightClassCatch Weight	
poly(ReachCms, 3)1:WeightClassFeatherweight	
poly(ReachCms, 3)2:WeightClassFeatherweight	
poly(ReachCms, 3)3:WeightClassFeatherweight	
poly(ReachCms, 3)1:WeightClassFlyweight	
poly(ReachCms, 3)2:WeightClassFlyweight	
poly(ReachCms, 3)3:WeightClassFlyweight	
poly(ReachCms, 3)1:WeightClassHeavyweight	
poly(ReachCms, 3)2:WeightClassHeavyweight	
poly(ReachCms, 3)3:WeightClassHeavyweight	
poly(ReachCms, 3)1:WeightClassLight Heavyweight	
poly(ReachCms, 3)2:WeightClassLight Heavyweight	
poly(ReachCms, 3)3:WeightClassLight Heavyweight	

```

poly(ReachCms, 3)1:WeightClassLightweight
poly(ReachCms, 3)2:WeightClassLightweight
poly(ReachCms, 3)3:WeightClassLightweight
poly(ReachCms, 3)1:WeightClassMiddleweight
poly(ReachCms, 3)2:WeightClassMiddleweight
poly(ReachCms, 3)3:WeightClassMiddleweight
poly(ReachCms, 3)1:WeightClassWelterweight
poly(ReachCms, 3)2:WeightClassWelterweight
poly(ReachCms, 3)3:WeightClassWelterweight
poly(ReachCms, 3)1:WeightClassWomen's Bantamweight
poly(ReachCms, 3)2:WeightClassWomen's Bantamweight
poly(ReachCms, 3)3:WeightClassWomen's Bantamweight
poly(ReachCms, 3)1:WeightClassWomen's Featherweight
poly(ReachCms, 3)2:WeightClassWomen's Featherweight
poly(ReachCms, 3)3:WeightClassWomen's Featherweight
poly(ReachCms, 3)1:WeightClassWomen's Flyweight      0.016
poly(ReachCms, 3)2:WeightClassWomen's Flyweight      0.015
poly(ReachCms, 3)3:WeightClassWomen's Flyweight      0.022
poly(ReachCms, 3)1:WeightClassWomen's Strawweight    0.014
poly(ReachCms, 3)2:WeightClassWomen's Strawweight    0.016
poly(ReachCms, 3)3:WeightClassWomen's Strawweight    0.026
                                         ply(RchCms,3)1:WghtClssWmn'sFl

poly(ReachCms, 3)1
poly(ReachCms, 3)2
poly(ReachCms, 3)3
WeightClassCatch Weight
WeightClassFeatherweight
WeightClassFlyweight
WeightClassHeavyweight
WeightClassLight Heavyweight
WeightClassLightweight
WeightClassMiddleweight
WeightClassWelterweight
WeightClassWomen's Bantamweight
WeightClassWomen's Featherweight
WeightClassWomen's Flyweight
WeightClassWomen's Strawweight
poly(Height, 8)1
poly(Height, 8)2
poly(Height, 8)3
poly(Height, 8)4
poly(Height, 8)5
poly(Height, 8)6

```

```

poly(Height, 8)7
poly(Height, 8)8
WinStreak
poly(ReachCms, 3)1:WeightClassCatch Weight
poly(ReachCms, 3)2:WeightClassCatch Weight
poly(ReachCms, 3)3:WeightClassCatch Weight
poly(ReachCms, 3)1:WeightClassFeatherweight
poly(ReachCms, 3)2:WeightClassFeatherweight
poly(ReachCms, 3)3:WeightClassFeatherweight
poly(ReachCms, 3)1:WeightClassFlyweight
poly(ReachCms, 3)2:WeightClassFlyweight
poly(ReachCms, 3)3:WeightClassFlyweight
poly(ReachCms, 3)1:WeightClassHeavyweight
poly(ReachCms, 3)2:WeightClassHeavyweight
poly(ReachCms, 3)3:WeightClassHeavyweight
poly(ReachCms, 3)1:WeightClassLight Heavyweight
poly(ReachCms, 3)2:WeightClassLight Heavyweight
poly(ReachCms, 3)3:WeightClassLight Heavyweight
poly(ReachCms, 3)1:WeightClassLightweight
poly(ReachCms, 3)2:WeightClassLightweight
poly(ReachCms, 3)3:WeightClassLightweight
poly(ReachCms, 3)1:WeightClassMiddleweight
poly(ReachCms, 3)2:WeightClassMiddleweight
poly(ReachCms, 3)3:WeightClassMiddleweight
poly(ReachCms, 3)1:WeightClassWelterweight
poly(ReachCms, 3)2:WeightClassWelterweight
poly(ReachCms, 3)3:WeightClassWelterweight
poly(ReachCms, 3)1:WeightClassWomen's Bantamweight
poly(ReachCms, 3)2:WeightClassWomen's Bantamweight
poly(ReachCms, 3)3:WeightClassWomen's Bantamweight
poly(ReachCms, 3)1:WeightClassWomen's Featherweight
poly(ReachCms, 3)2:WeightClassWomen's Featherweight
poly(ReachCms, 3)3:WeightClassWomen's Featherweight
poly(ReachCms, 3)1:WeightClassWomen's Flyweight
poly(ReachCms, 3)2:WeightClassWomen's Flyweight      0.991
poly(ReachCms, 3)3:WeightClassWomen's Flyweight      0.913
poly(ReachCms, 3)1:WeightClassWomen's Strawweight    0.021
poly(ReachCms, 3)2:WeightClassWomen's Strawweight    0.031
poly(ReachCms, 3)3:WeightClassWomen's Strawweight    0.098
                                         ply(RchCms,3)2:WghtClssWmn'sFl
poly(ReachCms, 3)1
poly(ReachCms, 3)2
poly(ReachCms, 3)3

```

```
WeightClassCatch Weight
WeightClassFeatherweight
WeightClassFlyweight
WeightClassHeavyweight
WeightClassLight Heavyweight
WeightClassLightweight
WeightClassMiddleweight
WeightClassWelterweight
WeightClassWomen's Bantamweight
WeightClassWomen's Featherweight
WeightClassWomen's Flyweight
WeightClassWomen's Strawweight
poly(Height, 8)1
poly(Height, 8)2
poly(Height, 8)3
poly(Height, 8)4
poly(Height, 8)5
poly(Height, 8)6
poly(Height, 8)7
poly(Height, 8)8
WinStreak
poly(ReachCms, 3)1:WeightClassCatch Weight
poly(ReachCms, 3)2:WeightClassCatch Weight
poly(ReachCms, 3)3:WeightClassCatch Weight
poly(ReachCms, 3)1:WeightClassFeatherweight
poly(ReachCms, 3)2:WeightClassFeatherweight
poly(ReachCms, 3)3:WeightClassFeatherweight
poly(ReachCms, 3)1:WeightClassFlyweight
poly(ReachCms, 3)2:WeightClassFlyweight
poly(ReachCms, 3)3:WeightClassFlyweight
poly(ReachCms, 3)1:WeightClassHeavyweight
poly(ReachCms, 3)2:WeightClassHeavyweight
poly(ReachCms, 3)3:WeightClassHeavyweight
poly(ReachCms, 3)1:WeightClassLight Heavyweight
poly(ReachCms, 3)2:WeightClassLight Heavyweight
poly(ReachCms, 3)3:WeightClassLight Heavyweight
poly(ReachCms, 3)1:WeightClassLightweight
poly(ReachCms, 3)2:WeightClassLightweight
poly(ReachCms, 3)3:WeightClassLightweight
poly(ReachCms, 3)1:WeightClassMiddleweight
poly(ReachCms, 3)2:WeightClassMiddleweight
poly(ReachCms, 3)3:WeightClassMiddleweight
poly(ReachCms, 3)1:WeightClassWelterweight
```

```

poly(ReachCms, 3)2:WeightClassWelterweight
poly(ReachCms, 3)3:WeightClassWelterweight
poly(ReachCms, 3)1:WeightClassWomen's Bantamweight
poly(ReachCms, 3)2:WeightClassWomen's Bantamweight
poly(ReachCms, 3)3:WeightClassWomen's Bantamweight
poly(ReachCms, 3)1:WeightClassWomen's Featherweight
poly(ReachCms, 3)2:WeightClassWomen's Featherweight
poly(ReachCms, 3)3:WeightClassWomen's Featherweight
poly(ReachCms, 3)1:WeightClassWomen's Flyweight
poly(ReachCms, 3)2:WeightClassWomen's Flyweight
poly(ReachCms, 3)3:WeightClassWomen's Flyweight      0.938
poly(ReachCms, 3)1:WeightClassWomen's Strawweight     0.024
poly(ReachCms, 3)2:WeightClassWomen's Strawweight     0.036
poly(ReachCms, 3)3:WeightClassWomen's Strawweight     0.106
                                         ply(RchCms,3)3:WghtClssWmn'sFl

poly(ReachCms, 3)1
poly(ReachCms, 3)2
poly(ReachCms, 3)3
WeightClassCatch Weight
WeightClassFeatherweight
WeightClassFlyweight
WeightClassHeavyweight
WeightClassLight Heavyweight
WeightClassLightweight
WeightClassMiddleweight
WeightClassWelterweight
WeightClassWomen's Bantamweight
WeightClassWomen's Featherweight
WeightClassWomen's Flyweight
WeightClassWomen's Strawweight
poly(Height, 8)1
poly(Height, 8)2
poly(Height, 8)3
poly(Height, 8)4
poly(Height, 8)5
poly(Height, 8)6
poly(Height, 8)7
poly(Height, 8)8
WinStreak
poly(ReachCms, 3)1:WeightClassCatch Weight
poly(ReachCms, 3)2:WeightClassCatch Weight
poly(ReachCms, 3)3:WeightClassCatch Weight
poly(ReachCms, 3)1:WeightClassFeatherweight

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```

poly(ReachCms, 3)2:WeightClassFeatherweight
poly(ReachCms, 3)3:WeightClassFeatherweight
poly(ReachCms, 3)1:WeightClassFlyweight
poly(ReachCms, 3)2:WeightClassFlyweight
poly(ReachCms, 3)3:WeightClassFlyweight
poly(ReachCms, 3)1:WeightClassHeavyweight
poly(ReachCms, 3)2:WeightClassHeavyweight
poly(ReachCms, 3)3:WeightClassHeavyweight
poly(ReachCms, 3)1:WeightClassLight Heavyweight
poly(ReachCms, 3)2:WeightClassLight Heavyweight
poly(ReachCms, 3)3:WeightClassLight Heavyweight
poly(ReachCms, 3)1:WeightClassLightweight
poly(ReachCms, 3)2:WeightClassLightweight
poly(ReachCms, 3)3:WeightClassLightweight
poly(ReachCms, 3)1:WeightClassMiddleweight
poly(ReachCms, 3)2:WeightClassMiddleweight
poly(ReachCms, 3)3:WeightClassMiddleweight
poly(ReachCms, 3)1:WeightClassWelterweight
poly(ReachCms, 3)2:WeightClassWelterweight
poly(ReachCms, 3)3:WeightClassWelterweight
poly(ReachCms, 3)1:WeightClassWomen's Bantamweight
poly(ReachCms, 3)2:WeightClassWomen's Bantamweight
poly(ReachCms, 3)3:WeightClassWomen's Bantamweight
poly(ReachCms, 3)1:WeightClassWomen's Featherweight
poly(ReachCms, 3)2:WeightClassWomen's Featherweight
poly(ReachCms, 3)3:WeightClassWomen's Featherweight
poly(ReachCms, 3)1:WeightClassWomen's Flyweight
poly(ReachCms, 3)2:WeightClassWomen's Flyweight
poly(ReachCms, 3)3:WeightClassWomen's Flyweight
poly(ReachCms, 3)1:WeightClassWomen's Strawweight      0.040
poly(ReachCms, 3)2:WeightClassWomen's Strawweight      0.058
poly(ReachCms, 3)3:WeightClassWomen's Strawweight      0.213
                                         p(RC,3)1S p(RC,3)2S

poly(ReachCms, 3)1
poly(ReachCms, 3)2
poly(ReachCms, 3)3
WeightClassCatch Weight
WeightClassFeatherweight
WeightClassFlyweight
WeightClassHeavyweight
WeightClassLight Heavyweight
WeightClassLightweight
WeightClassMiddleweight

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```
WeightClassWelterweight
WeightClassWomen's Bantamweight
WeightClassWomen's Featherweight
WeightClassWomen's Flyweight
WeightClassWomen's Strawweight
poly(Height, 8)1
poly(Height, 8)2
poly(Height, 8)3
poly(Height, 8)4
poly(Height, 8)5
poly(Height, 8)6
poly(Height, 8)7
poly(Height, 8)8
WinStreak
poly(ReachCms, 3)1:WeightClassCatch Weight
poly(ReachCms, 3)2:WeightClassCatch Weight
poly(ReachCms, 3)3:WeightClassCatch Weight
poly(ReachCms, 3)1:WeightClassFeatherweight
poly(ReachCms, 3)2:WeightClassFeatherweight
poly(ReachCms, 3)3:WeightClassFeatherweight
poly(ReachCms, 3)1:WeightClassFlyweight
poly(ReachCms, 3)2:WeightClassFlyweight
poly(ReachCms, 3)3:WeightClassFlyweight
poly(ReachCms, 3)1:WeightClassHeavyweight
poly(ReachCms, 3)2:WeightClassHeavyweight
poly(ReachCms, 3)3:WeightClassHeavyweight
poly(ReachCms, 3)1:WeightClassLight Heavyweight
poly(ReachCms, 3)2:WeightClassLight Heavyweight
poly(ReachCms, 3)3:WeightClassLight Heavyweight
poly(ReachCms, 3)1:WeightClassLightweight
poly(ReachCms, 3)2:WeightClassLightweight
poly(ReachCms, 3)3:WeightClassLightweight
poly(ReachCms, 3)1:WeightClassMiddleweight
poly(ReachCms, 3)2:WeightClassMiddleweight
poly(ReachCms, 3)3:WeightClassMiddleweight
poly(ReachCms, 3)1:WeightClassWelterweight
poly(ReachCms, 3)2:WeightClassWelterweight
poly(ReachCms, 3)3:WeightClassWelterweight
poly(ReachCms, 3)1:WeightClassWomen's Bantamweight
poly(ReachCms, 3)2:WeightClassWomen's Bantamweight
poly(ReachCms, 3)3:WeightClassWomen's Bantamweight
poly(ReachCms, 3)1:WeightClassWomen's Featherweight
poly(ReachCms, 3)2:WeightClassWomen's Featherweight
```

```

poly(ReachCms, 3)3:WeightClassWomen's Featherweight
poly(ReachCms, 3)1:WeightClassWomen's Flyweight
poly(ReachCms, 3)2:WeightClassWomen's Flyweight
poly(ReachCms, 3)3:WeightClassWomen's Flyweight
poly(ReachCms, 3)1:WeightClassWomen's Strawweight
poly(ReachCms, 3)2:WeightClassWomen's Strawweight      0.995
poly(ReachCms, 3)3:WeightClassWomen's Strawweight      0.918      0.941

```

Standardized residuals:

Min	Q1	Med	Q3	Max
-2.1093698	-0.8231808	-0.2840271	0.6641415	6.6886944

Residual standard error: 20.04083

Degrees of freedom: 9735 total; 9674 residual

```

# Diagnostic plots
par(mfrow = c(2, 2), mar=c(2,2,2,2))

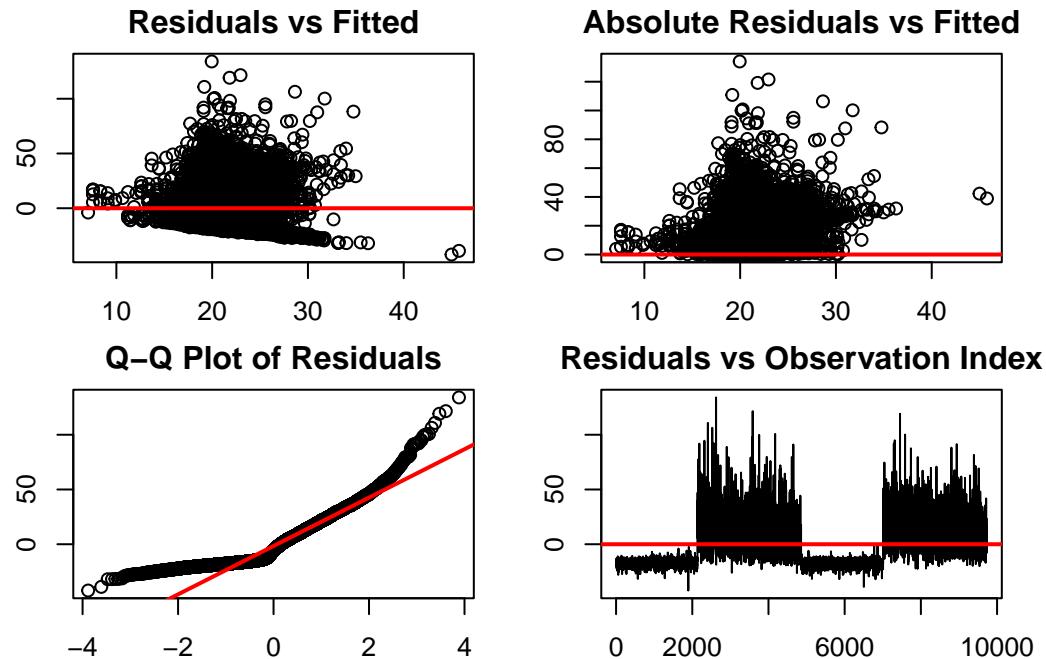
# 1. Residuals vs Fitted
plot(fitted(gls_model), residuals(gls_model),
      xlab = "Fitted Values", ylab = "Residuals",
      main = "Residuals vs Fitted")
abline(h = 0, col = "red", lwd = 2)

# 2. Absolute Residuals vs Fitted
plot(fitted(gls_model), abs(residuals(gls_model)),
      xlab = "Fitted Values", ylab = "Absolute Residuals",
      main = "Absolute Residuals vs Fitted")
abline(h = 0, col = "red", lwd = 2)

# 3. Q-Q Plot of Residuals
qqnorm(residuals(gls_model), main = "Q-Q Plot of Residuals")
qqline(residuals(gls_model), col = "red", lwd = 2)

# 4. Residuals vs Index
plot(residuals(gls_model), type = "l",
      xlab = "Observation Index", ylab = "Residuals",
      main = "Residuals vs Observation Index")
abline(h = 0, col = "red", lwd = 2)

```



Removing influential points

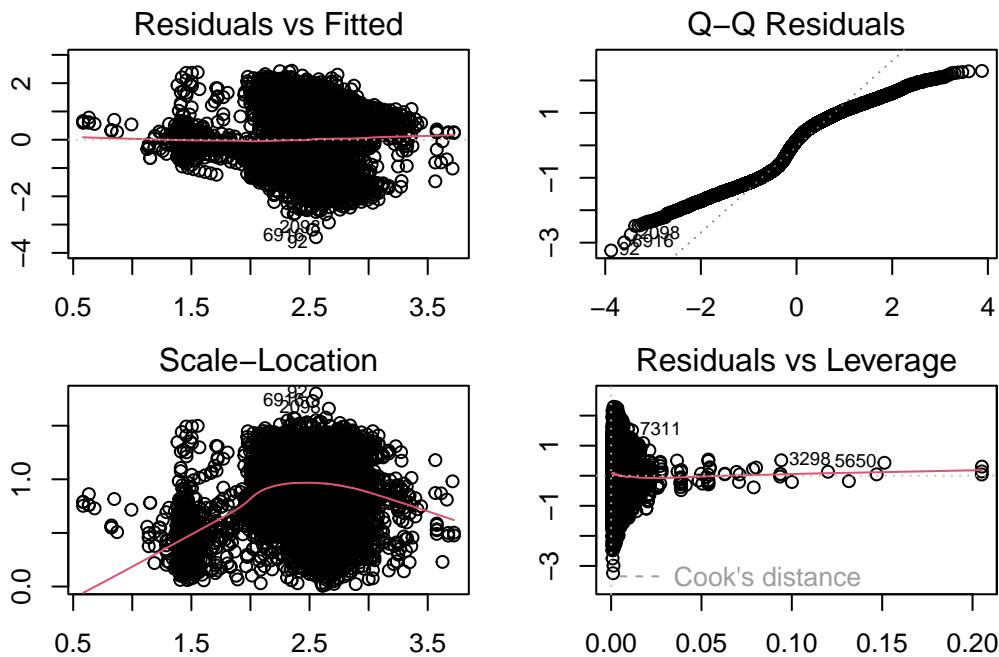
```

cooks_d <- cook's.distance(model)
influential <- which(cooks_d > (4 / nrow(ufc_q1)))
ufc_q1_clean <- ufc_q1[-influential, ]

model_clean <- lm(LogAvgSigStrLanded ~ LogReachCms * WeightClass + Height + WinStreak, data = ufc_q1_clean)

par(mfrow = c(2, 2), mar = c(2,2,2,2))
plot(model_clean)

```

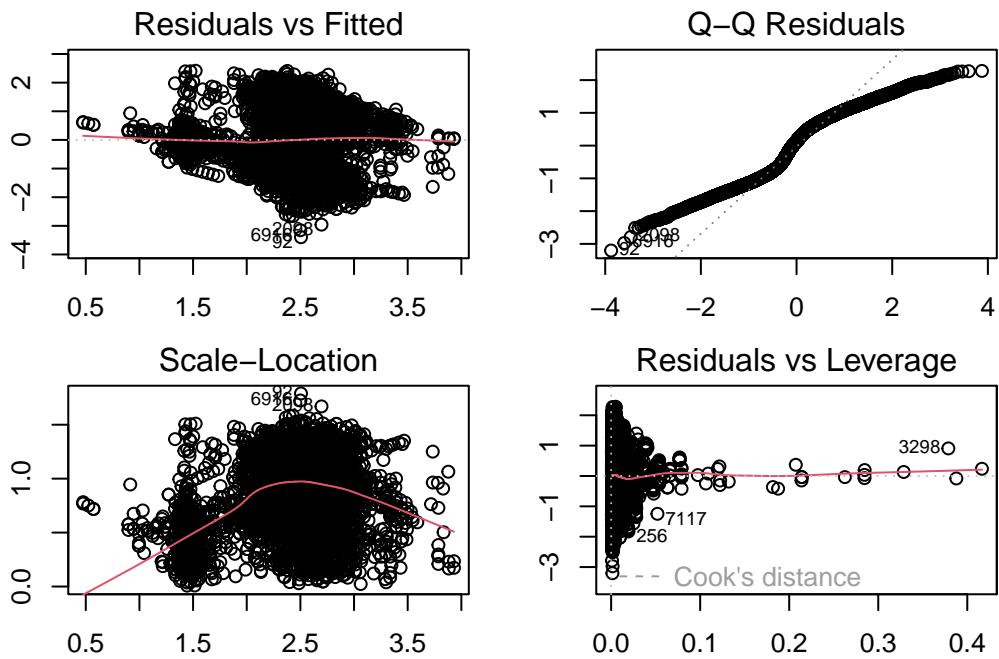


This proved somewhat helpful.

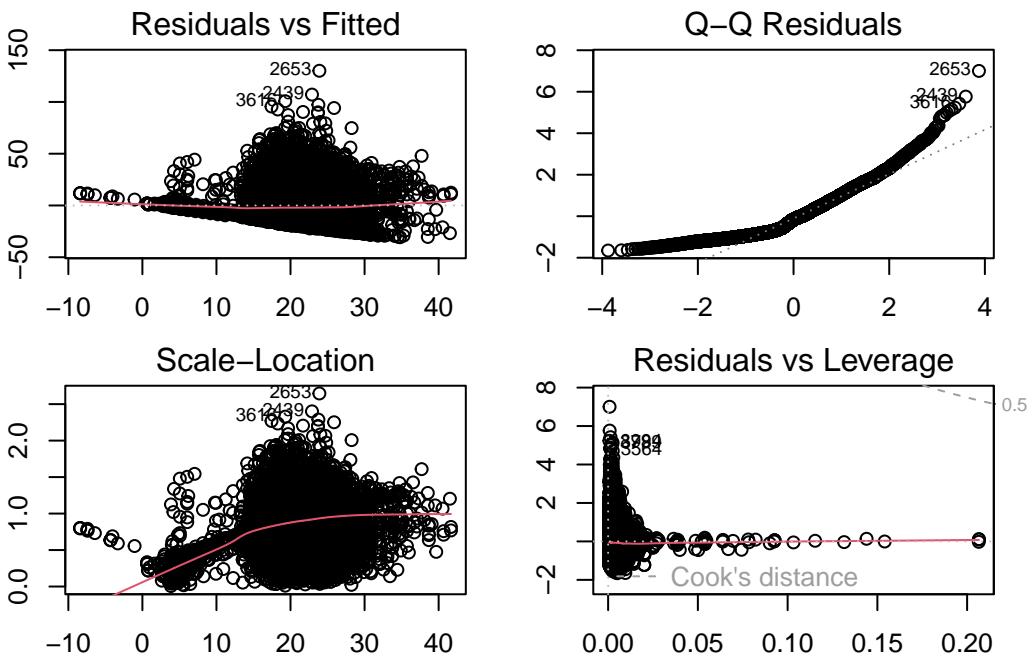
Linearity is still an issue.

```
model_poly <- lm(LogAvgSigStrLanded ~ poly(LogReachCms, 2) * WeightClass + poly(log(Height), 2))

par(mfrow = c(2, 2), mar = c(2,2,2,2))
plot(model_poly)
```



```
model_trans <- lm(AvgSigStrLanded ~ sqrt(ReachCms) * WeightClass + sqrt(Height) + WinStreak,
par(mfrow = c(2, 2), mar = c(2,2,2,2))
plot(model_trans)
```



```
model_interaction <- lm(LogAvgSigStrLanded ~ LogReachCms * WeightClass * Height + WinStreak,
                         data = ufc_q1_clean)
summary(model_interaction)
```

Call:

```
lm(formula = LogAvgSigStrLanded ~ LogReachCms * WeightClass *
    Height + WinStreak, data = ufc_q1_clean)
```

Residuals:

Min	1Q	Median	3Q	Max
-3.4178	-0.9811	0.1437	0.9074	2.4178

Coefficients:

	Estimate	Std. Error
(Intercept)	4.864e+02	2.038e+02
LogReachCms	-9.206e+01	3.943e+01
WeightClassCatch Weight	-3.828e+02	3.185e+02
WeightClassFeatherweight	-1.815e+02	2.619e+02
WeightClassFlyweight	5.029e+02	3.684e+02
WeightClassHeavyweight	-1.085e+02	2.457e+02
WeightClassLight Heavyweight	-8.877e+02	3.083e+02

WeightClassLightweight	-3.462e+02	2.507e+02
WeightClassMiddleweight	-2.133e+02	2.700e+02
WeightClassWelterweight	-4.113e+02	2.523e+02
WeightClassWomen's Bantamweight	-6.770e+02	4.638e+02
WeightClassWomen's Featherweight	9.716e+01	1.538e+03
WeightClassWomen's Flyweight	-4.276e+02	3.924e+02
WeightClassWomen's Strawweight	-1.397e+03	3.921e+02
Height	-2.801e+00	1.195e+00
WinStreak	4.838e-02	6.854e-03
LogReachCms:WeightClassCatch Weight	7.202e+01	6.144e+01
LogReachCms:WeightClassFeatherweight	3.402e+01	5.056e+01
LogReachCms:WeightClassFlyweight	-9.906e+01	7.155e+01
LogReachCms:WeightClassHeavyweight	2.047e+01	4.718e+01
LogReachCms:WeightClassLight Heavyweight	1.700e+02	5.907e+01
LogReachCms:WeightClassLightweight	6.587e+01	4.836e+01
LogReachCms:WeightClassMiddleweight	3.947e+01	5.193e+01
LogReachCms:WeightClassWelterweight	7.838e+01	4.862e+01
LogReachCms:WeightClassWomen's Bantamweight	1.307e+02	9.028e+01
LogReachCms:WeightClassWomen's Featherweight	-1.979e+01	2.984e+02
LogReachCms:WeightClassWomen's Flyweight	8.074e+01	7.646e+01
LogReachCms:WeightClassWomen's Strawweight	2.703e+02	7.669e+01
LogReachCms:Height	5.325e-01	2.311e-01
WeightClassCatch Weight:Height	2.309e+00	1.825e+00
WeightClassFeatherweight:Height	1.315e+00	1.520e+00
WeightClassFlyweight:Height	-2.551e+00	2.190e+00
WeightClassHeavyweight:Height	8.957e-01	1.400e+00
WeightClassLight Heavyweight:Height	4.917e+00	1.707e+00
WeightClassLightweight:Height	2.119e+00	1.451e+00
WeightClassMiddleweight:Height	1.482e+00	1.530e+00
WeightClassWelterweight:Height	2.499e+00	1.446e+00
WeightClassWomen's Bantamweight:Height	3.910e+00	2.755e+00
WeightClassWomen's Featherweight:Height	-6.441e-01	8.856e+00
WeightClassWomen's Flyweight:Height	2.474e+00	2.350e+00
WeightClassWomen's Strawweight:Height	8.320e+00	2.397e+00
LogReachCms:WeightClassCatch Weight:Height	-4.357e-01	3.514e-01
LogReachCms:WeightClassFeatherweight:Height	-2.476e-01	2.934e-01
LogReachCms:WeightClassFlyweight:Height	5.031e-01	4.252e-01
LogReachCms:WeightClassHeavyweight:Height	-1.693e-01	2.690e-01
LogReachCms:WeightClassLight Heavyweight:Height	-9.409e-01	3.273e-01
LogReachCms:WeightClassLightweight:Height	-4.030e-01	2.799e-01
LogReachCms:WeightClassMiddleweight:Height	-2.758e-01	2.944e-01
LogReachCms:WeightClassWelterweight:Height	-4.757e-01	2.786e-01
LogReachCms:WeightClassWomen's Bantamweight:Height	-7.549e-01	5.362e-01

	t	value	Pr(> t )
(Intercept)	2.387	0.017010	*
LogReachCms	-2.335	0.019567	*
WeightClassCatch Weight	-1.202	0.229436	
WeightClassFeatherweight	-0.693	0.488210	
WeightClassFlyweight	1.365	0.172217	
WeightClassHeavyweight	-0.441	0.658893	
WeightClassLight Heavyweight	-2.879	0.003996	**
WeightClassLightweight	-1.381	0.167322	
WeightClassMiddleweight	-0.790	0.429566	
WeightClassWelterweight	-1.631	0.103008	
WeightClassWomen's Bantamweight	-1.460	0.144430	
WeightClassWomen's Featherweight	0.063	0.949626	
WeightClassWomen's Flyweight	-1.090	0.275961	
WeightClassWomen's Strawweight	-3.564	0.000367	***
Height	-2.344	0.019101	*
WinStreak	7.058	1.81e-12	***
LogReachCms:WeightClassCatch Weight	1.172	0.241119	
LogReachCms:WeightClassFeatherweight	0.673	0.501079	
LogReachCms:WeightClassFlyweight	-1.385	0.166222	
LogReachCms:WeightClassHeavyweight	0.434	0.664402	
LogReachCms:WeightClassLight Heavyweight	2.877	0.004020	**
LogReachCms:WeightClassLightweight	1.362	0.173232	
LogReachCms:WeightClassMiddleweight	0.760	0.447243	
LogReachCms:WeightClassWelterweight	1.612	0.106975	
LogReachCms:WeightClassWomen's Bantamweight	1.447	0.147841	
LogReachCms:WeightClassWomen's Featherweight	-0.066	0.947109	
LogReachCms:WeightClassWomen's Flyweight	1.056	0.290970	
LogReachCms:WeightClassWomen's Strawweight	3.524	0.000426	***
LogReachCms:Height	2.304	0.021242	*
WeightClassCatch Weight:Height	1.265	0.205787	
WeightClassFeatherweight:Height	0.865	0.386855	
WeightClassFlyweight:Height	-1.165	0.244086	
WeightClassHeavyweight:Height	0.640	0.522457	
WeightClassLight Heavyweight:Height	2.880	0.003987	**
WeightClassLightweight:Height	1.461	0.144162	
WeightClassMiddleweight:Height	0.969	0.332759	
WeightClassWelterweight:Height	1.728	0.083955	.
WeightClassWomen's Bantamweight:Height	1.419	0.155878	
WeightClassWomen's Featherweight:Height	-0.073	0.942018	

```

WeightClassWomen's Flyweight:Height           1.053 0.292484
WeightClassWomen's Strawweight:Height         3.471 0.000522 ***
LogReachCms:WeightClassCatch Weight:Height   -1.240 0.214965
LogReachCms:WeightClassFeatherweight:Height  -0.844 0.398691
LogReachCms:WeightClassFlyweight:Height       1.183 0.236809
LogReachCms:WeightClassHeavyweight:Height     -0.629 0.529129
LogReachCms:WeightClassLight Heavyweight:Height -2.874 0.004057 **
LogReachCms:WeightClassLightweight:Height     -1.440 0.149947
LogReachCms:WeightClassMiddleweight:Height    -0.937 0.348806
LogReachCms:WeightClassWelterweight:Height    -1.707 0.087829 .
LogReachCms:WeightClassWomen's Bantamweight:Height -1.408 0.159179
LogReachCms:WeightClassWomen's Featherweight:Height 0.075 0.940058
LogReachCms:WeightClassWomen's Flyweight:Height   -1.023 0.306526
LogReachCms:WeightClassWomen's Strawweight:Height -3.432 0.000602 ***
---
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

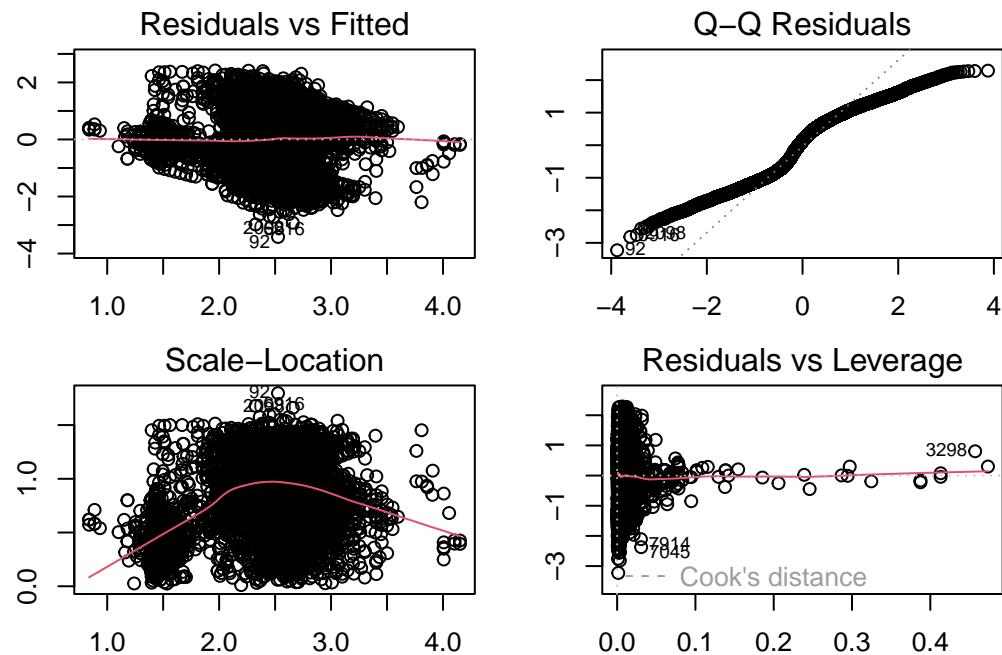
```

Residual standard error: 1.06 on 9376 degrees of freedom  
 Multiple R-squared: 0.1013, Adjusted R-squared: 0.09631  
 F-statistic: 20.32 on 52 and 9376 DF, p-value: < 2.2e-16

```

par(mfrow = c(2, 2), mar = c(2,2,2,2))
plot(model_interaction)

```



```
library(randomForest)
```

randomForest 4.7-1.2

Type rfNews() to see new features/changes/bug fixes.

Attaching package: 'randomForest'

The following object is masked from 'package:ggplot2':

margin

The following object is masked from 'package:dplyr':

combine

```
model_rf <- randomForest(LogAvgSigStrLanded ~ LogReachCms + WeightClass + Height + WinStreak  
                           data = ufc_q1_clean)  
print(model_rf)
```

Call:

```
randomForest(formula = LogAvgSigStrLanded ~ LogReachCms + WeightClass + Height + WinStreak)
```

Type of random forest: regression

Number of trees: 500

No. of variables tried at each split: 1

Mean of squared residuals: 1.085478

% Var explained: 12.63

```
library(mgcv)
```

This is mgcv 1.9-1. For overview type 'help("mgcv-package")'.

```
model_gam <- gam(LogAvgSigStrLanded ~ s(LogReachCms) + LogReachCms*WeightClass + s(Height) +  
                   summary(model_gam)
```

Family: gaussian  
Link function: identity

Formula:

$\text{LogAvgSigStrLanded} \sim s(\text{LogReachCms}) + \text{LogReachCms} * \text{WeightClass} + s(\text{Height}) + \text{WeightClass} + s(\text{WinStreak}) + s(\text{LogReachCms}, \text{Height})$

Parametric coefficients:

	Estimate	Std. Error	t value
(Intercept)	0.08277	0.00298	27.773
LogReachCms	0.43825	0.01333	32.878
WeightClassCatch Weight	-0.18270	17.29783	-0.011
WeightClassFeatherweight	32.57677	8.34692	3.903
WeightClassFlyweight	73.19676	10.06025	7.276
WeightClassHeavyweight	13.17422	13.18572	0.999
WeightClassLight Heavyweight	15.05307	13.07889	1.151
WeightClassLightweight	16.96616	8.76777	1.935
WeightClassMiddleweight	18.73789	11.45045	1.636
WeightClassWelterweight	23.42148	10.32262	2.269
WeightClassWomen's Bantamweight	-7.69667	16.03302	-0.480
WeightClassWomen's Featherweight	-16.64829	40.63195	-0.410
WeightClassWomen's Flyweight	-18.40959	12.23024	-1.505
WeightClassWomen's Strawweight	-34.61888	16.17517	-2.140
LogReachCms:WeightClassCatch Weight	-0.12553	3.32864	-0.038
LogReachCms:WeightClassFeatherweight	-6.23328	1.61214	-3.866
LogReachCms:WeightClassFlyweight	-14.29167	1.95407	-7.314
LogReachCms:WeightClassHeavyweight	-2.46913	2.52402	-0.978
LogReachCms:WeightClassLight Heavyweight	-2.80554	2.50492	-1.120
LogReachCms:WeightClassLightweight	-3.18028	1.69182	-1.880
LogReachCms:WeightClassMiddleweight	-3.54299	2.19942	-1.611
LogReachCms:WeightClassWelterweight	-4.40008	1.98699	-2.214
LogReachCms:WeightClassWomen's Bantamweight	1.42903	3.11829	0.458
LogReachCms:WeightClassWomen's Featherweight	3.00988	7.88367	0.382
LogReachCms:WeightClassWomen's Flyweight	3.36606	2.38003	1.414
LogReachCms:WeightClassWomen's Strawweight	6.69803	3.16265	2.118
Pr(> t )			
(Intercept)	< 2e-16 ***		
LogReachCms	< 2e-16 ***		
WeightClassCatch Weight	0.991573		
WeightClassFeatherweight	9.57e-05 ***		
WeightClassFlyweight	3.72e-13 ***		
WeightClassHeavyweight	0.317758		

```

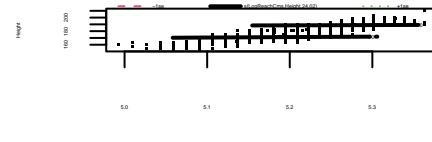
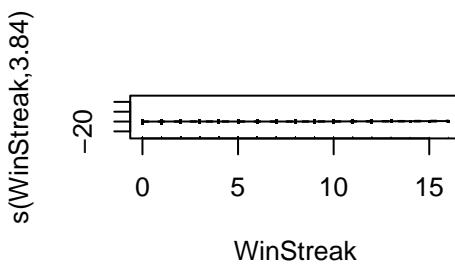
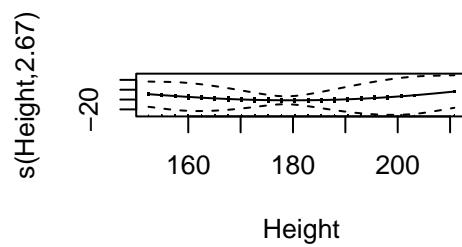
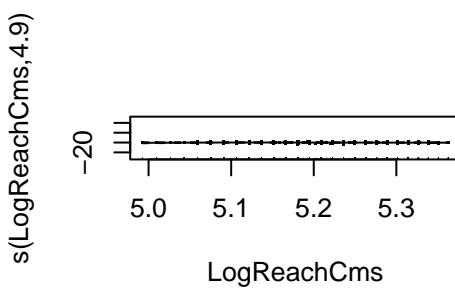
WeightClassLight Heavyweight          0.249785
WeightClassLightweight               0.053013 .
WeightClassMiddleweight             0.101783 *
WeightClassWelterweight            0.023294 *
WeightClassWomen's Bantamweight     0.631202
WeightClassWomen's Featherweight    0.682010
WeightClassWomen's Flyweight        0.132293
WeightClassWomen's Strawweight      0.032360 *
LogReachCms:WeightClassCatch Weight 0.969917
LogReachCms:WeightClassFeatherweight 0.000111 ***
LogReachCms:WeightClassFlyweight   2.81e-13 ***
LogReachCms:WeightClassHeavyweight 0.327975
LogReachCms:WeightClassLight Heavyweight 0.262737
LogReachCms:WeightClassLightweight 0.060167 .
LogReachCms:WeightClassMiddleweight 0.107240
LogReachCms:WeightClassWelterweight 0.026822 *
LogReachCms:WeightClassWomen's Bantamweight 0.646766
LogReachCms:WeightClassWomen's Featherweight 0.702628
LogReachCms:WeightClassWomen's Flyweight 0.157308
LogReachCms:WeightClassWomen's Strawweight 0.034214 *
---
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Approximate significance of smooth terms:
          edf Ref.df      F p-value
s(LogReachCms) 4.905  6.349  0.724  0.667
s(Height)       2.670  2.708  0.081  0.959
s(WinStreak)    3.838  4.647 17.352 <2e-16 ***
s(LogReachCms,Height) 24.020 26.000  3.475 <2e-16 ***
---
Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

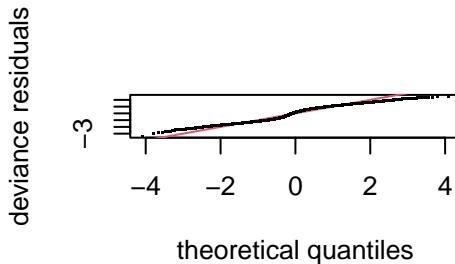
Rank: 78/79
R-sq.(adj) = 0.105 Deviance explained = 11.1%
GCV = 1.1189 Scale est. = 1.1117 n = 9429

```

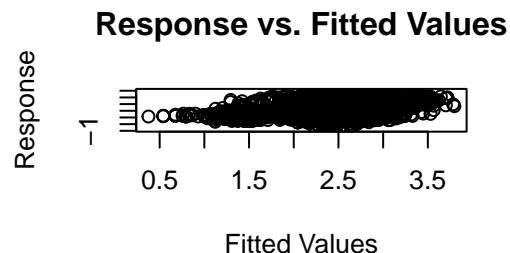
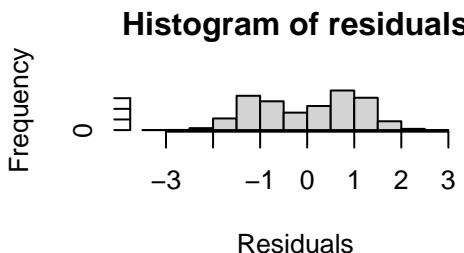
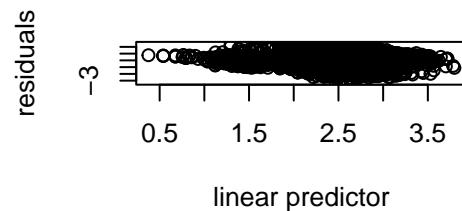
```
plot(model_gam, pages = 1, residuals = TRUE)
```



```
gam.check(model_gam)
```



### Resids vs. linear pred.



```
Method: GCV  Optimizer: magic
Smoothing parameter selection converged after 15 iterations.
The RMS GCV score gradient at convergence was 1.68976e-06 .
The Hessian was not positive definite.
Model rank =  78 / 79
```

Basis dimension (k) checking results. Low p-value (k-index<1) may indicate that k is too low, especially if edf is close to k'.

	k'	edf	k-index	p-value
s(LogReachCms)	9.00	4.90	1.01	0.710
s(Height)	9.00	2.67	1.01	0.685
s(WinStreak)	9.00	3.84	1.01	0.780
s(LogReachCms,Height)	26.00	24.02	0.96	0.005 **

---

Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1