

Put Something Here

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Table 1: All possible Samples of Size 3 from 3969, 3204, and 2892

x_1^*	x_2^*	x_3^*	\bar{x}^*
3969	3969	3969	3969
3969	3969	3204	3714
3969	3969	2892	3610
3969	3204	3969	3714
3969	3204	3204	3459
3969	3204	2892	3355
3969	2892	3969	3610
3969	2892	3204	3355
3969	2892	2892	3251
3204	3969	3969	3714
3204	3969	3204	3459
3204	3969	2892	3355
3204	3204	3969	3459
3204	3204	3204	3204
3204	3204	2892	3100
3204	2892	3969	3355
3204	2892	3204	3100
3204	2892	2892	2996
2892	3969	3969	3610
2892	3969	3204	3355
2892	3969	2892	3251
2892	3204	3969	3355
2892	3204	3204	3100
2892	3204	2892	2996
2892	2892	3969	3251
2892	2892	3204	2996
2892	2892	2892	2892

Look at Table [3](#)!

Table 2: All possible Samples of Size 3 from 3969, 3204, and 2892

	x_1^*	x_2^*	x_3^*	\bar{x}^*
1	3969	3969	3969	3969
2	3969	3969	3204	3714
3	3969	3969	2892	3610
4	3969	3204	3969	3714
5	3969	3204	3204	3459
6	3969	3204	2892	3355
7	3969	2892	3969	3610
8	3969	2892	3204	3355
9	3969	2892	2892	3251
10	3204	3969	3969	3714
11	3204	3969	3204	3459
12	3204	3969	2892	3355
13	3204	3204	3969	3459
14	3204	3204	3204	3204
15	3204	3204	2892	3100
16	3204	2892	3969	3355
17	3204	2892	3204	3100
18	3204	2892	2892	2996
19	2892	3969	3969	3610
20	2892	3969	3204	3355
21	2892	3969	2892	3251
22	2892	3204	3969	3355
23	2892	3204	3204	3100
24	2892	3204	2892	2996
25	2892	2892	3969	3251
26	2892	2892	3204	2996
27	2892	2892	2892	2892

Table 3: All possible Samples of Size 3 from 3969, 3204, and 2892

	x_1^*	x_2^*	x_3^*	\bar{x}^*
1	3969	3969	3969	3969
2	3969	3969	3204	3714
3	3969	3969	2892	3610
4	3969	3204	3969	3714
5	3969	3204	3204	3459
6	3969	3204	2892	3355
7	3969	2892	3969	3610
8	3969	2892	3204	3355
9	3969	2892	2892	3251
10	3204	3969	3969	3714
11	3204	3969	3204	3459
12	3204	3969	2892	3355
13	3204	3204	3969	3459
14	3204	3204	3204	3204
15	3204	3204	2892	3100
16	3204	2892	3969	3355
17	3204	2892	3204	3100
18	3204	2892	2892	2996
19	2892	3969	3969	3610
20	2892	3969	3204	3355
21	2892	3969	2892	3251
22	2892	3204	3969	3355
23	2892	3204	3204	3100
24	2892	3204	2892	2996
25	2892	2892	3969	3251
26	2892	2892	3204	2996
27	2892	2892	2892	2892

Table 4: All possible Samples of Size 3 from 3969, 3204, and 2892

x_1^*	x_2^*	x_3^*	\bar{x}^*
3969	3969	3969	3969
3969	3969	3204	3714
3969	3969	2892	3610
3969	3204	3969	3714
3969	3204	3204	3459
3969	3204	2892	3355
3969	2892	3969	3610
3969	2892	3204	3355
3969	2892	2892	3251
3204	3969	3969	3714
3204	3969	3204	3459
3204	3969	2892	3355
3204	3204	3969	3459
3204	3204	3204	3204
3204	3204	2892	3100
3204	2892	3969	3355
3204	2892	3204	3100
3204	2892	2892	2996
2892	3969	3969	3610
2892	3969	3204	3355
2892	3969	2892	3251
2892	3204	3969	3355
2892	3204	3204	3100
2892	3204	2892	2996
2892	2892	3969	3251
2892	2892	3204	2996
2892	2892	2892	2892

Table 5: All possible Samples of Size 3 from 3969, 3204, and 2892

x_1^*	x_2^*	x_3^*	\bar{x}^*
3969	3969	3969	3969
3969	3969	3204	3714
3969	3969	2892	3610
3969	3204	3969	3714
3969	3204	3204	3459
3969	3204	2892	3355
3969	2892	3969	3610
3969	2892	3204	3355
3969	2892	2892	3251
3204	3969	3969	3714
3204	3969	3204	3459
3204	3969	2892	3355
3204	3204	3969	3459
3204	3204	3204	3204
3204	3204	2892	3100
3204	2892	3969	3355
3204	2892	3204	3100
3204	2892	2892	2996
2892	3969	3969	3610
2892	3969	3204	3355
2892	3969	2892	3251
2892	3204	3969	3355
2892	3204	3204	3100
2892	3204	2892	2996
2892	2892	3969	3251
2892	2892	3204	2996
2892	2892	2892	2892

Table 6: All possible Samples of Size 3 from 3969, 3204, and 2892

	x_1^*	x_2^*	x_3^*	\bar{x}^*
1	3969	3969	3969	3969
2	3969	3969	3204	3714
3	3969	3969	2892	3610
4	3969	3204	3969	3714
5	3969	3204	3204	3459
6	3969	3204	2892	3355
7	3969	2892	3969	3610
8	3969	2892	3204	3355
9	3969	2892	2892	3251
10	3204	3969	3969	3714
11	3204	3969	3204	3459
12	3204	3969	2892	3355
13	3204	3204	3969	3459
14	3204	3204	3204	3204
15	3204	3204	2892	3100
16	3204	2892	3969	3355
17	3204	2892	3204	3100
18	3204	2892	2892	2996
19	2892	3969	3969	3610
20	2892	3969	3204	3355
21	2892	3969	2892	3251
22	2892	3204	3969	3355
23	2892	3204	3204	3100
24	2892	3204	2892	2996
25	2892	2892	3969	3251
26	2892	2892	3204	2996
27	2892	2892	2892	2892

Analysis of Variance Table

Response: Wear

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Treat	3	33.187	11.0625	27.947	6.824e-05 ***
Block	3	32.688	10.8958	27.526	7.254e-05 ***
Residuals	9	3.563	0.3958		

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

Table 7: Default values for ANOVA table

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Treat	3	33.19	11.06	27.95	0.0001
Block	3	32.69	10.90	27.53	0.0001
Residuals	9	3.56	0.40		

Table 8: Digits = 7

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Treat	3.0000000	33.1875000	11.0625000	27.9473684	0.0000682
Block	3.0000000	32.6875000	10.8958333	27.5263158	0.0000725
Residuals	9.0000000	3.5625000	0.3958333		

Table 9: Digits = Different

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Treat	3	33.1875	11.0625	27.9474	0.0000682
Block	3	32.6875	10.8958	27.5263	0.0000725
Residuals	9	3.5625	0.3958		

Table 18: Useful Commands When Working with Numeric Vectors

Function	Description
<code>cbind(x, y)</code>	Joins vectors x and y as columns of vectors
<code>cor(x, y)</code>	Computes the correlation coefficient
<code>cos(x)</code>	Returns the cosine for all values in x
<code>exp(x)</code>	Computes e^x for all values in x
<code>fivenum(x)</code>	Computes the smallest value, the lower hinge, the median, the upper hinge, and the largest value of a vector x
<code>floor(x)</code>	Returns a numeric vector containing the largest integers not greater than the corresponding elements of x
<code>IQR(x)</code>	Returns the interquartile range of x
<code>length(x)</code>	The number of values in x
<code>log(x)</code>	Computes the natural logarithm for all values in x
<code>log10(x)</code>	Computes the base 10 logarithm for all values in x
<code>mad(x, constant = 1)</code>	Returns the median absolute deviation of x
<code>max(x)</code>	The largest value of x

Table 18: Useful Commands When Working with Numeric Vectors
(continued)

Function	Description
<code>mean(x)</code>	Computes the sample mean of x
<code>median(x)</code>	Returns the sample median of x
<code>min(x)</code>	The smallest value of x
<code>prod(x)</code>	The product of all the values in x
<code>quantile(x)</code>	Computes the quantiles of a data set stored in a vector x
<code>range(x)</code>	Returns the smallest and largest values in x
<code>rbind(x, y)</code>	Joins vectors x and y as rows of vectors
<code>rep(x, n)</code>	Repeats vector x n times
<code>round(x, n)</code>	Rounds the number of decimals to n for object x
<code>scale(x)</code>	Computes the z -score of x
<code>sd(x)</code>	Computes the sample standard deviation of x
<code>seq(x, y, n)</code>	Creates a sequence of numbers from x to y with incremental value n
<code>sin(x)</code>	Returns the sine for all values in x
<code>sqrt(x)</code>	Computes the square root for all values in x
<code>sum(x)</code>	The sum of all the values in x
<code>summary(x)</code>	Returns the minimum, the first quartile, the median, the mean, the third quartile, and the maximum of x
<code>tan(x)</code>	Returns the tangent for all values in x
<code>var(x)</code>	Computes the sample variance of x
<code>which(x == n)</code>	Give the index of number n in vector x

Table 19: Useful Commands When Working with Numeric Vectors

Function	Description
<code>cbind(x, y)</code>	Joins vectors x and y as columns of vectors
<code>cor(x, y)</code>	Computes the correlation coefficient
<code>cos(x)</code>	Returns the cosine for all values in x
<code>exp(x)</code>	Computes e^x for all values in x
<code>fivenum(x)</code>	Computes the smallest value, the lower hinge, the median, the upper hinge, and the largest value of a vector x
<code>floor(x)</code>	Returns a numeric vector containing the largest integers not greater than the corresponding elements of x
<code>IQR(x)</code>	Returns the interquartile range of x
<code>length(x)</code>	The number of values in x
<code>log(x)</code>	Computes the natural logarithm for all values in x
<code>log10(x)</code>	Computes the base 10 logarithm for all values in x
<code>mad(x, constant = 1)</code>	Returns the median absolute deviation of x
<code>max(x)</code>	The largest value of x
<code>mean(x)</code>	Computes the sample mean of x

Table 19: Useful Commands When Working with Numeric Vectors
(continued)

Function	Description
<code>median(x)</code>	Returns the sample median of x
<code>min(x)</code>	The smallest value of x
<code>prod(x)</code>	The product of all the values in x
<code>quantile(x)</code>	Computes the quantiles of a data set stored in a vector x
<code>range(x)</code>	Returns the smallest and largest values in x
<code>rbind(x, y)</code>	Joins vectors x and y as rows of vectors
<code>rep(x, n)</code>	Repeats vector x n times
<code>round(x, n)</code>	Rounds the number of decimals to n for object x
<code>scale(x)</code>	Computes the z -score of x
<code>sd(x)</code>	Computes the sample standard deviation of x
<code>seq(x, y, n)</code>	Creates a sequence of numbers from x to y with incremental value n
<code>sin(x)</code>	Returns the sine for all values in x
<code>sqrt(x)</code>	Computes the square root for all values in x
<code>sum(x)</code>	The sum of all the values in x
<code>summary(x)</code>	Returns the minimum, the first quartile, the median, the mean, the third quartile, and the maximum of x
<code>tan(x)</code>	Returns the tangent for all values in x
<code>var(x)</code>	Computes the sample variance of x
<code>which(x == n)</code>	Give the index of number n in vector x

Table 20: Useful Commands When Working with Numeric Vectors

Function	Description
<code>cbind(x, y)</code>	Joins vectors x and y as columns of vectors
<code>cor(x, y)</code>	Computes the correlation coefficient
<code>cos(x)</code>	Returns the cosine for all values in x
<code>exp(x)</code>	Computes e^x for all values in x
<code>fivenum(x)</code>	Computes the smallest value, the lower hinge, the median, the upper hinge, and the largest value of a vector x
<code>floor(x)</code>	Returns a numeric vector containing the largest integers not greater than the corresponding elements of x
<code>IQR(x)</code>	Returns the interquartile range of x
<code>length(x)</code>	The number of values in x
<code>log(x)</code>	Computes the natural logarithm for all values in x
<code>log10(x)</code>	Computes the base 10 logarithm for all values in x
<code>mad(x, constant = 1)</code>	Returns the median absolute deviation of x
<code>max(x)</code>	The largest value of x

Table 20: Useful Commands When Working with Numeric Vectors
(continued)

Function	Description
<code>mean(x)</code>	Computes the sample mean of x
<code>median(x)</code>	Returns the sample median of x
<code>min(x)</code>	The smallest value of x
<code>prod(x)</code>	The product of all the values in x
<code>quantile(x)</code>	Computes the quantiles of a data set stored in a vector x
<code>range(x)</code>	Returns the smallest and largest values in x
<code>rbind(x, y)</code>	Joins vectors x and y as rows of vectors
<code>rep(x, n)</code>	Repeats vector x n times
<code>round(x, n)</code>	Rounds the number of decimals to n for object x
<code>scale(x)</code>	Computes the z -score of x
<code>sd(x)</code>	Computes the sample standard deviation of x
<code>seq(x, y, n)</code>	Creates a sequence of numbers from x to y with incremental value n
<code>sin(x)</code>	Returns the sine for all values in x
<code>sqrt(x)</code>	Computes the square root for all values in x
<code>sum(x)</code>	The sum of all the values in x
<code>summary(x)</code>	Returns the minimum, the first quartile, the median, the mean, the third quartile, and the maximum of x
<code>tan(x)</code>	Returns the tangent for all values in x
<code>var(x)</code>	Computes the sample variance of x
<code>which(x == n)</code>	Give the index of number n in vector x

Table 21: Useful Commands When Working with Numeric Vectors

Function	Description
<code>cbind(x, y)</code>	Joins vectors x and y as columns of vectors
<code>cor(x, y)</code>	Computes the correlation coefficient
<code>cos(x)</code>	Returns the cosine for all values in x
<code>exp(x)</code>	Computes e^x for all values in x
<code>fivenum(x)</code>	Computes the smallest value, the lower hinge, the median, the upper hinge, and the largest value of a vector x
<code>floor(x)</code>	Returns a numeric vector containing the largest integers not greater than the corresponding elements of x
<code>IQR(x)</code>	Returns the interquartile range of x
<code>length(x)</code>	The number of values in x
<code>log(x)</code>	Computes the natural logarithm for all values in x
<code>log10(x)</code>	Computes the base 10 logarithm for all values in x
<code>mad(x, constant = 1)</code>	Returns the median absolute deviation of x
<code>max(x)</code>	The largest value of x
<code>mean(x)</code>	Computes the sample mean of x

Table 21: Useful Commands When Working with Numeric Vectors
(continued)

Function	Description
<code>median(x)</code>	Returns the sample median of x
<code>min(x)</code>	The smallest value of x
<code>prod(x)</code>	The product of all the values in x
<code>quantile(x)</code>	Computes the quantiles of a data set stored in a vector x
<code>range(x)</code>	Returns the smallest and largest values in x
<code>rbind(x, y)</code>	Joins vectors x and y as rows of vectors
<code>rep(x, n)</code>	Repeats vector x n times
<code>round(x, n)</code>	Rounds the number of decimals to n for object x
<code>scale(x)</code>	Computes the z -score of x
<code>sd(x)</code>	Computes the sample standard deviation of x
<code>seq(x, y, n)</code>	Creates a sequence of numbers from x to y with incremental value n
<code>sin(x)</code>	Returns the sine for all values in x
<code>sqrt(x)</code>	Computes the square root for all values in x
<code>sum(x)</code>	The sum of all the values in x
<code>summary(x)</code>	Returns the minimum, the first quartile, the median, the mean, the third quartile, and the maximum of x
<code>tan(x)</code>	Returns the tangent for all values in x
<code>var(x)</code>	Computes the sample variance of x
<code>which(x == n)</code>	Give the index of number n in vector x

Table 22: R Vector and Matrix Functions

Function	Description
<code>A%*%B</code>	Matrix multiplication of A and B
<code>diag(matrix)</code>	Extracts the diagonal elements of the matrix
<code>diag(vector)</code>	Produces a diagonal matrix with the elements from the vector
<code>dim(matrix)</code>	Obtains the matrix dimensions
<code>dimnames(matrix)</code>	Verifies if rows and columns names have been assigned
<code>eigen(matrix)</code>	Used to compute eigenvalues and eigenvectors
<code>matrix(vector, nrow=r, byrow=TRUE)</code>	Creates a matrix by rows with n rows
<code>names(vector)</code>	Allows the assignment of names to a vector

Table 22: R Vector and Matrix Functions (continued)

Function	Description
<code>order(vector, matrix, data frames)</code>	Orders by more than one variable
<code>set.seed(number)</code>	Reproduces the same set of pseudo-random numbers
<code>solve(A)</code>	Used to find the inverse of a matrix A
<code>solve(A,b)</code>	Used to solve systems of equations $\mathbf{Ax} = \mathbf{b}$
<code>sort(vector)</code>	Produces an ordered vector
<code>svd(matrix)</code>	Used to find the singular value decomposition of a matrix
<code>t(A)</code>	Used to find the transpose of a matrix A

Table 10: Digits and Display

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
Treat	3	33.187	11.062	27.947	6.82e-05
Block	3	32.688	10.896	27.526	7.25e-05
Residuals	9	3.563	0.396		

Table 11: Digits and Display Fancy Stuff

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	ϕ -value
Treat	3	33.187	11.062	27.947	6.82e-05
Block	3	32.688	10.896	27.526	7.25e-05
Residuals	9	3.563	0.396		

Table 12: Digits and Display Fancy Stuff More So

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	ϕ -value
Treat	3	33.187	11.062	27.947	6.82e-05
Block	3	32.688	10.896	27.526	7.25e-05
Residuals	9	3.563	0.396		

Table 13: Digits and Display Fancy Stuff More So and Booktabs

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	ϕ -value
Treat	3	33.187	11.062	27.947	6.82e-05
Block	3	32.688	10.896	27.526	7.25e-05
Residuals	9	3.563	0.396		

	Hamstring Stretch	Traditional Sitting
Difficult	63	51
Easy	100	107
Impossible	8	13

	Hamstring Stretch	Traditional Sitting
Difficult	63	51
Easy	100	107
Impossible	8	13

	Difficult	Easy	Impossible
A	20	39	2
B	58	49	8
C	21	72	0
D	15	47	11

Table 14: Put something here ...

First name	Last Name	Grade
John	Doe	7.5
Richard	Miles	2

Table 15: Put something here ...

First name	Last Name	Grade
John	Doe	7.5
Richard	Miles	2

Table 16: Looking just OK

Name		
First name	Last Name	Grade
John	Doe	7.5
Richard	Miles	2

Table 17: Looking Good!

Name		
First name	Last Name	Grade
John	Doe	7.5
Richard	Miles	2

	mpg	cyl	disp	hp	drat	wt
Mazda RX4	21.0000	6.0000	160.0000	110.0000	3.9000	2.6200
Mazda RX4 Wag	21.0000	6.0000	160.0000	110.0000	3.9000	2.8750
Datsun 710	22.8000	4.0000	108.0000	93.0000	3.8500	2.3200
Hornet 4 Drive	21.4000	6.0000	258.0000	110.0000	3.0800	3.2150
Hornet Sportabout	18.7000	8.0000	360.0000	175.0000	3.1500	3.4400
Valiant	18.1000	6.0000	225.0000	105.0000	2.7600	3.4600

	mpg	cyl	disp	hp	drat	wt
Mazda RX4	21.0000	6.0000	160.0000	110.0000	3.9000	2.6200
Mazda RX4 Wag	21.0000	6.0000	160.0000	110.0000	3.9000	2.8750
Datsun 710	22.8000	4.0000	108.0000	93.0000	3.8500	2.3200
Hornet 4 Drive	21.4000	6.0000	258.0000	110.0000	3.0800	3.2150
Hornet Sportabout	18.7000	8.0000	360.0000	175.0000	3.1500	3.4400
Valiant	18.1000	6.0000	225.0000	105.0000	2.7600	3.4600

	mpg	cyl	disp	hp	drat	wt
Mazda RX4	21.0000	6.0000	160.0000	110.0000	3.9000	2.6200
Mazda RX4 Wag	21.0000	6.0000	160.0000	110.0000	3.9000	2.8750
Datsun 710	22.8000	4.0000	108.0000	93.0000	3.8500	2.3200
Hornet 4 Drive	21.4000	6.0000	258.0000	110.0000	3.0800	3.2150
Hornet Sportabout	18.7000	8.0000	360.0000	175.0000	3.1500	3.4400
Valiant	18.1000	6.0000	225.0000	105.0000	2.7600	3.4600

Name		
First name	Last Name	Grade
John	Doe	7.5
Richard	Miles	2

Table 23: Looking Good!