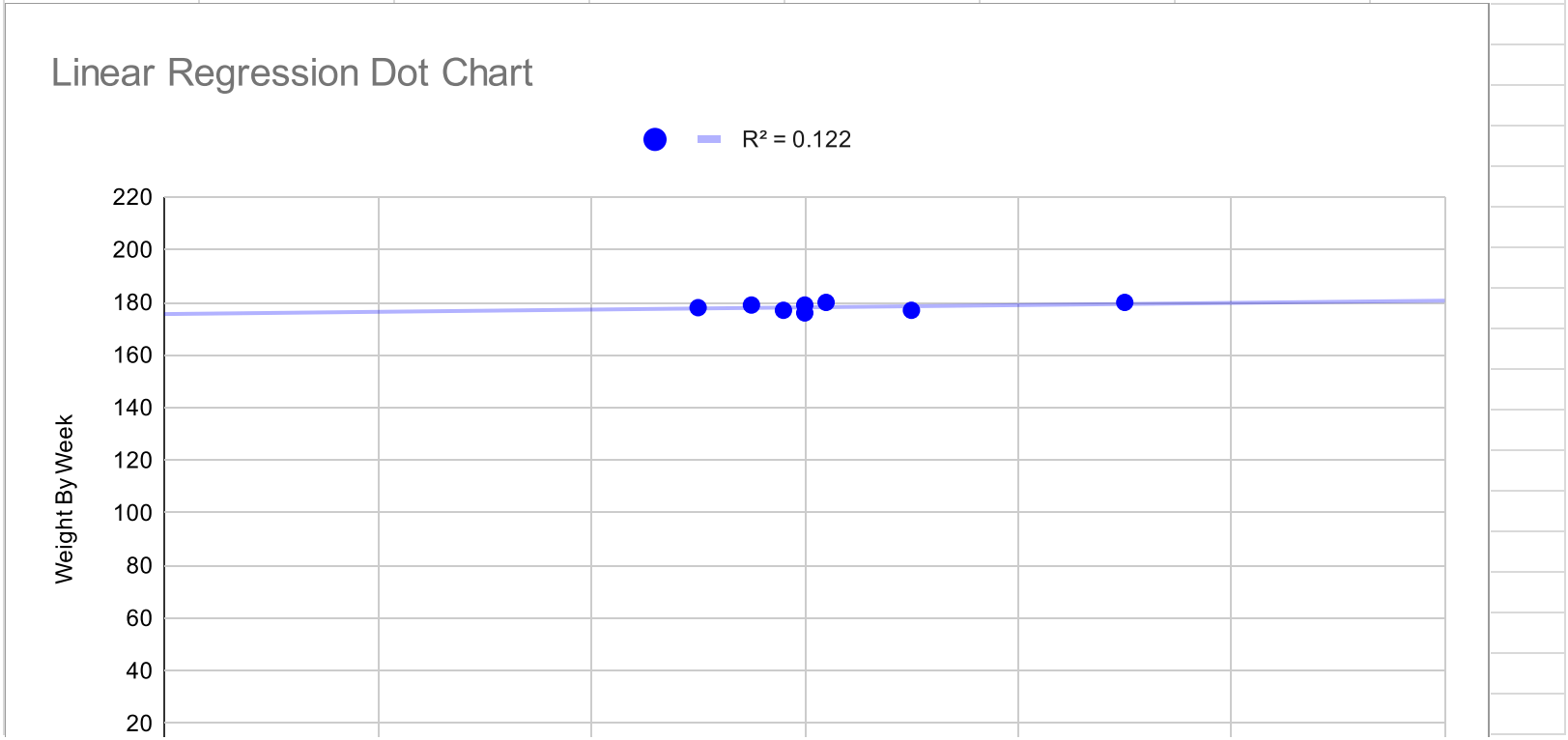
[1]	Minutes	Weight	X - x̄	Y - ȳ	(X-x̄)^2	(Y - ȳ)^2	(X-x̄)(Y - ȳ)
[2]	90	180	26.875	1.75	722.266	3.062	47.031
	50	178	-13.125	-0.25	172.266	0.062	3.281
	60	179	-3.125	0.75	9.766	0.562	-2.344
	70	177	6.875	-1.25	47.266	1.562	-8.594
	62	180	-1.125	1.75	1.266	3.062	-1.969
	55	179	-8.125	0.75	66.016	0.562	-6.094
	58	177	-5.125	-1.25	26.266	1.562	6.406
	60	176	-3.125	-2.25	9.766	5.062	7.031
Sum	**505**	**1426**	-	-	-	-	**44.75**
Mean	**63.125**	**178.25**	-	-	-	-	-
SSx=∑(X - x̄)^2	**1054.875**	-					
SSy=∑(Y - ȳ)^2	-	**15.5**					




0
0
20
40
60
80
100
120
Minutes Spent Running For the Week

[1] Key

X: X Values
Y: Y Values
$\bar{x}$: Mean of X Values
$\bar{y}$: Mean of Y Values
$X - \bar{x}$ & $Y - \bar{y}$: Deviation scores
$(X - \bar{x})^2$ & $(Y - \bar{y})^2$: Deviation Squared
$(X - \bar{x})(Y - \bar{y})$: Product of Deviation Scores
SSx: Sum of squares for X
SSy: Sum of squares for Y

[2] Calculations

X Values
$\sum = 505$
Mean = 63.125
$\sum(X - \bar{x})^2 = SSx = 1054.875$

Y Values
$\sum = 1426$
Mean = 178.25
$\sum(Y - \bar{y})^2 = SSy = 15.5$

X and Y Combined
N = 8
$\sum(X - \bar{x})(Y - \bar{y}) = 44.75$

R Calculation
$r = \sum((X - \bar{y})(Y - \bar{x})) / \sqrt{((SSx)(SSy))}$

$r = 44.75 / \sqrt{((1054.875)(15.5))} = 0.35$

Key Values:
r = 0.35
$r^2 = .122$