[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					

Linear Regression Dot Chart

R² = 0.122

Weight By Week (y-axis)

Minutes Spent Running For the Week (x-axis)
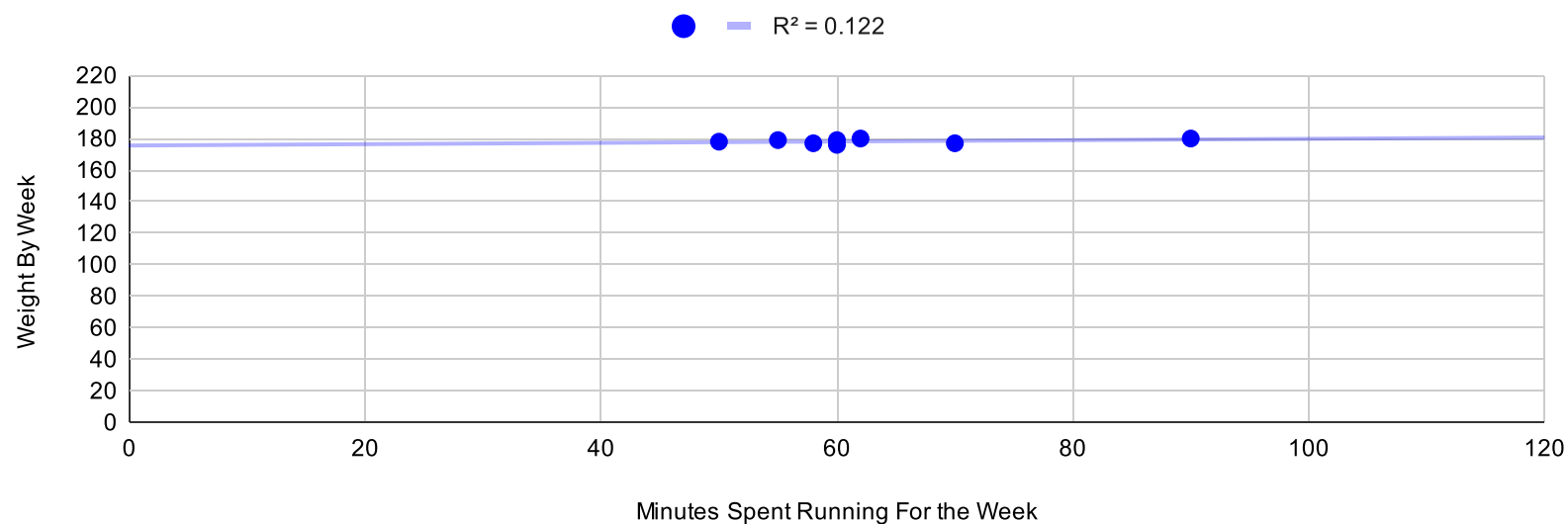
[1] Key

X: X Values
Y: Y Values
x̄: Mean of X Values
ȳ: Mean of Y Values
X - x̄ & Y - ȳ: Deviation scores
$(X - x̄)^2$ & $(Y - ȳ)^2$: Deviation Squared
$(X - x̄)(Y - ȳ)$: 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
$\sum(X - x̄)^2$ = SSx = 1054.875

Y Values
$\sum$ = 1426
Mean = 178.25
$\sum(Y - ȳ)^2$ = SSy = 15.5

X and Y Combined
N = 8
$\sum(X - x̄)(Y - ȳ)$ = 44.75

R Calculation
$r = \sum((X - ȳ)(Y - x̄)) / \sqrt{((SSx)(SSy))}$

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

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