

Hobby Hrs / Caffeine Intake

Pearson's

x	y
200	8
250	15
40	1
80	10
570	34

$$\bar{x} = 142.5$$

$$\bar{y} = 8.5$$

$x - \bar{x}$	$y - \bar{y}$	$(x - \bar{x}) \cdot (y - \bar{y})$	$(x - \bar{x})^2$	$(y - \bar{y})^2$
57.5	-0.5	-28.75	3306.25	0.25
107.5	6.5	698.75	11556.25	42.25
-102.5	-7.5	768.75	10506.25	56.25
-62.5	-1.5	93.75	3906.25	2.25
		1512.5	29275	101

$$r = \frac{1512.5}{\sqrt{29275 \cdot 101}} = 0.891$$