

Do Now: Regression of bivariate data

Name:

The flash rate of fireflies depends on various factors, including temperature. As the temperature drops, the flash rate slows down.

Firefly field data (simulated) where T is the temperature and $f(T)$ is the number of seconds between flashes.

T	54	60	64	70	75
$f(T)$	5	8	10	11	13

1. Plot the data in the table on the grid below
(one point is plotted for you)
2. Calculate the averages of both the temperature and flash period data.
3. Enter the data in your calculator and write down the correlation coefficient, r .
4. Approximately what how many seconds between each flash would you expect at $68^\circ F$?

Temperature dependence of male *Photinus aquilonius* fireflies

