

**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  $\bar{x}$  and  $\bar{y}$  and mark it with a small circle on the graph.
3. Write down the correlation and characterize it.
4. Model the flash period for a temperature of  $68^\circ F$

Temperature dependence of male *Photinus aquilonius* fireflies

