Assignment 16.11287

Arranging the given data in form of a table

x	$\bar{x}$	$x-\bar{x}$	$(x-\bar{x})^2$
$1550	$1158.333	391.6667	153402.8
$1700	$1158.333	541.6667	293402.8
$900	$1158.333	-258.333	66736.11
$850	$1158.333	-308.333	95069.44
$1000	$1158.333	-158.333	25069.44
$950	$1158.333	-208.333	43402.78

Calculating $\bar{x}$ (mean) and inserting in the table $\Rightarrow \frac{\sum x_i}{N} \Rightarrow \frac{\$1550 + \$1700 + \$900 + \$850 + \$1000 + \$950}{6}$

Here N = 6

$\Rightarrow 1158.333$

Standard deviation $= \sqrt{\frac{\sum (x-\bar{x})^2}{N}}$

$\Rightarrow \sqrt{\frac{153402.8 + 293402.8 + 66736.11 + 95069.44 + 25069.44 + 43402.78}{6}}$

$\Rightarrow \$335.9274$