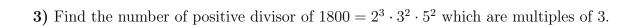
California State University Sacramento - Math 101 $\bf Quiz~\#2$

1) How many pairs of distinct integers $\{a,b\}$ with $a,b \in \{1,2,\ldots,10\}$ satisfy |a-b|=3?

Name: _____

2)	How many	pairs of d	listinct integ	gers $\{a,b\}$	with $a, b \in$	$\in \{1, 2, \ldots,$	10} satisfy	$ a-b \le 3?$



4) Find the number of positive divisors of $1800 = 2^3 \cdot 3^2 \cdot 5^2$ that are multiples of 6.

5) Let $A_1 = \{1, 2, 3\}$, $A_2 = \{2, 3\}$, and $A_3 = \{1, 2, 3, 4\}$. Find the number of 3-tuples (a_1, a_2, a_3) where $a_1 \in A_1$, $a_2 \in A_2$, and $a_3 \in A_3$.