

**EE 325 Quiz 1 (10 points)**

The following table gives the joint PDF of the discrete variables  $X$  and  $Y$

		$X$		
		9	0	-9
$Y$	-3	0	$\frac{1}{9}$	$\frac{2}{9}$
	0	0	$\frac{1}{9}$	$\frac{1}{9}$
	3	$\frac{2}{9}$	0	$\frac{2}{9}$

1. Find the marginal PDF of  $X$  (2 points)
2. Find the marginal PDF of  $Y$  (2 points)
3. Find the expected value of  $Y$  (3 points)
4. Find the expected value of  $Y$  given  $X$  is equal to 9 (3 points)