

5.  $a, b \in \mathbb{W}$

$a^2 + b^2 \rightarrow$  divisible by 10.

Then unit digits of square to be.

0 0

1 9

2 8

3 7

~~4 4~~

4 6

5 5

of  
a and b.

So, From 0  $\rightarrow$  9.

numbers	0	1	2	3	4	5	6	7	8	9
Squares	0	1	4	9	6	5	6	9	4	1

$\rightarrow$  possibilities are

$$\left\{ \begin{array}{cc} 0 & 0 \\ 1 & 9 \\ 4 & 6 \\ 5 & 5 \\ 6 & 4 \\ 9 & 1 \end{array} \right\}$$

From (0-9)

0      0       $\rightarrow$        $1 \times 1$

1      9       $\rightarrow$        $2 \times 2$

4      6       $\rightarrow$        $2 \times 2$

5      5       $\rightarrow$        $1 \times 1$

6      4       $\rightarrow$        $2 \times 2$

9      1       $\rightarrow$        $2 \times 2$

Sum is 18.

Total possibilities are  $10 \times 10$ .

So,  $\boxed{\text{probability} = \frac{18}{100} = 18\%}$