Universiti Malaysia PAHANG
UMP
Engineering • Technology • Creativity

QUIZ 2

NAME	
COURSE CODE	DUM 2413 STATISTICS AND PROBABILITY
DURATION	10 MINUTES

The waiting times (in minutes) of 10 customers at the Bank A and the Bank B are shown as below:

Bank	Customer									
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
A	6.5	6.6	6.7	6.8	7.1	7.3	7.4	7.7	7.7	7.7
B	4.2	5.4	5.8	6.2	6.7	7.7	7.7	8.5	9.3	10.0

Find the measures of central tendency for both waiting times, respectively. Then, compares the distribution of both waiting times based on measures of central tendency.

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ANSWERS:

Measures of central tendency	Bank A	Bank B
Mean	7.15 minutes	7.15 minutes
Median	7.20 minutes	7.20 minutes
Mode	7.70 minutes	7.70 minutes

Shape of distribution:

Bank A

Since $(\text{Mean} = 7.15) < (\text{Median} = 7.20) < (\text{Mode} = 7.70)$, therefore the data of waiting time at Bank A show a left-skewed/negatively skewed distribution.

Bank B

Since $(\text{Mean} = 7.15) < (\text{Median} = 7.20) < (\text{Mode} = 7.70)$, therefore the data of waiting time at Bank B show a left-skewed/negatively skewed distribution.

Comparison:

The data of waiting time for both banks show the similar distribution, namely left-skewed/negatively skewed distribution.