



1. Add another column to the given table. Calculate the midpoint of each class interval- This can be done by adding the highest and lowest value of the interval and then dividing that by 2.

**Estimated Mean**

Km travelled to work	Frequency	Midpoint
$0\text{Km} \leq x < 5\text{Km}$	6	2.5Km
$5\text{Km} \leq x < 10\text{Km}$	4	7.5Km
$10\text{Km} \leq x < 20\text{Km}$	1	15Km

2. Add another column to the table. In this one, calculate midpoint multiplied by frequency.

Km travelled to work	Frequency	Midpoint	Midpoint x frequency
$0\text{Km} \leq x < 5\text{Km}$	6	2.5Km	$6 \times 2.5 = 15\text{Km}$
$5\text{Km} \leq x < 10\text{Km}$	4	7.5Km	30Km
$10\text{Km} \leq \text{time} < 20\text{Km}$	1	15Km	15Km

3. Calculate the total of the frequency column, and the total of the midpoint  $\times$  frequency column.

Km travelled to work	Frequency	Midpoint	Midpoint x frequency
$0\text{Km} \leq x < 5\text{Km}$	6	2.5Km	$6 \times 2.5 = 15\text{Km}$
$5\text{Km} \leq x < 10\text{Km}$	4	7.5Km	30Km
$10\text{Km} \leq \text{time} < 20\text{Km}$	1	15Km	15Km
	11		60Km

4. Divide the total of the midpoint  $\times$  frequency column by the total of the frequency column.

This gives you the estimated mean.

$$60\text{Km} \div 11 = 5.45\text{Km}$$



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