

a)
Estimate the mean time taken:

Time (t)	Frequency (f)	Midpoint (x)	$f \times x$
$0 < t \leq 10$	3	5	15
$10 < t \leq 20$	13	15	195
$20 < t \leq 30$	14	25	350
$30 < t \leq 40$	17	35	595
$40 < t \leq 50$	3	45	135
	50		1290

$$\text{Mean} = \frac{1290}{50} = 25.8$$

b)
Estimate the mean time taken:

Time (t)	Frequency (f)	Midpoint (x)	$f \times x$
$0 < t \leq 10$	2	5	10
$10 < t \leq 20$	8	15	120
$20 < t \leq 30$	11	25	275
$30 < t \leq 40$	15	35	525
$40 < t \leq 50$	4	45	180
			1110

$$\text{Mean} = \frac{1110}{\quad} =$$

c)
Estimate the mean time taken:

Time (t)	Frequency (f)	Midpoint (x)	$f \times x$
$0 < t \leq 10$	2	5	15
$10 < t \leq 20$	9	15	195
$20 < t \leq 30$	12	25	350
$30 < t \leq 40$	13	35	595
$40 < t \leq 50$	5	45	135

$$\text{Mean} = \frac{\quad}{\quad} =$$

d)
Estimate the mean time taken:

Time (t)	Frequency (f)	Midpoint (x)	$f \times x$
$0 < t \leq 20$	3	10	
$20 < t \leq 30$	7	25	
$30 < t \leq 40$	8	35	
$40 < t \leq 60$	5	50	
$60 < t \leq 90$	2	75	

$$\text{Mean} =$$

e)
Estimate the mean time taken:

Time (t)	Frequency (f)	Midpoint (x)
$0 < t \leq 10$	5	
$10 < t \leq 20$	12	
$20 < t \leq 30$	13	
$30 < t \leq 40$	7	
$40 < t \leq 50$	3	

$$\text{Mean} =$$

f)
Estimate the mean time taken:

Time (t)	Frequency (f)
$0 < t \leq 20$	2
$20 < t \leq 40$	8
$40 < t \leq 60$	9
$60 < t \leq 80$	5
$80 < t \leq 100$	1