

The histogram shows patient waiting times at a hospital

Time, t (mins)	Frequency
$0 \leq t < 5$	8
$5 \leq t < 10$	15
$10 \leq t < 20$	22
$20 \leq t < 55$	39
$55 \leq t < 60$	2

STEP 1: Work out the class widths

Time, t (mins)	Frequency	Class Widths
$0 \leq t < 5$	8	5
$5 \leq t < 10$	15	10
$10 \leq t < 20$	22	10
$20 \leq t < 55$	39	35
$55 \leq t < 60$	2	5

STEP 2: Work out the frequency densities

$$FD = \text{Frequency} \div \text{Class Width}$$

Time, t (mins)	Frequency	Class Widths	Frequency Density
$0 \leq t < 5$	8	5	$8 \div 5 = 1.6$
$5 \leq t < 10$	15	10	$15 \div 10 = 1.5$
$10 \leq t < 20$	22	10	$22 \div 10 = 2.2$
$20 \leq t < 55$	39	35	$39 \div 35 = 1.1$
$55 \leq t < 60$	2	5	$2 \div 5 = 0.4$

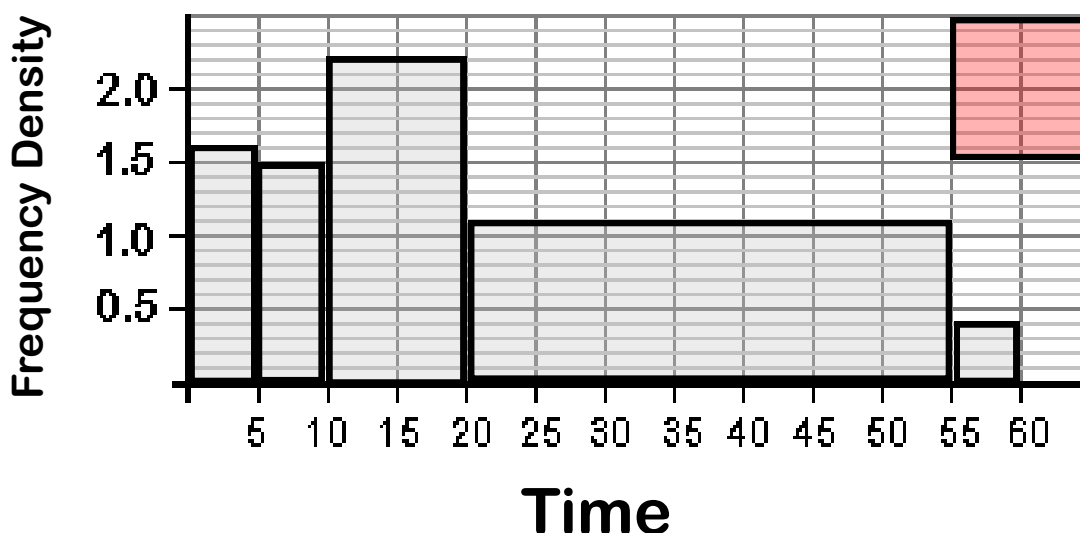
STEP 3:

Plot the histogram

Frequency Density on the y-axis (Vertical)

Time on the x-axis (Horizontal)

Hospital Waiting



Key

= 10×1

= 10 people