

Solutions for Quiz 1

Class interval	Height of the block (in %/10 years)	Area of the block (in %)
1800 – 1900	2	8
1900 – 1920	5	10
1920 – 1935	8	12
1935 – 1945	12	12
1945 – 1960	?	?
1960 – 1970	12	12
1970 – 1980	26	26
1980 – 1990	14	14

- (a) Total area is 100%. So the area of the missing block is $100\% - (8+10+12+12+12+26+14)\% = 6\%$. So, (ii) is correct.
- (b) The height of the missing block $= 6\%/15 \text{ years} = 4\%/10 \text{ years}$. So, (iv) is correct.
- (c) Add up the area from the leftmost block. Where the cumulative area is at least 25% for the first time, that block contains 25th percentile. So, (iii) is the correct answer.
- (d) The histogram is left skewed. So, (iii) is correct.
- (e) The y axis in this histogram represents the growth rate of wieneries. Therefore the growth rate is maximum during 1970-1980 and that interval contains the third quartile. So, (iv) is correct.