

Homework 1 MATH 1550 FALL 2019

Section 2.1

#15) a) class width = 10

b) midpoints = 10, 36, 47, 58, 69, 80, 91

c) class boundaries:

20, 30	64, 74
31, 41	75, 85
42, 52	86, 96
53, 63	

#20) a) # classes = 7

b) least freq ~ 1

c) most freq ~ 23

d) class width ~ 53

#29) # classes = 5

Soln: range = $\overset{\text{max}}{\downarrow} 39 - \overset{\text{min}}{\downarrow} 0 = 39$

class width = round up $\left(\frac{\text{range}}{\# \text{ classes}} \right) = \text{round up} \left(\frac{39}{5} \right) = 8$

greatest freq	Classes	frequency	rel. freq	cumul. freq	midpoint of class
↖	0-8	10	$\frac{10}{25} \approx 0.4$	10	4
↖	9-17	7	$\frac{7}{25} \approx 0.28$	17	13
	18-26	3	$\frac{3}{25} \approx 0.12$	20	22
	27-35	3	$\frac{3}{25} \approx 0.12$	23	31
↖	36-44	2	$\frac{2}{25} \approx 0.08$	25	40
least freq					

doing 8-16 is also ok as long as there is consistency in how freq. is counted

Section 2.3

#17) Using spreadsheet linked on webpage:

$$\text{mean} = 14.769$$

$$\text{median} = 15$$

$$\text{mode} = 16$$