

ACSP [07]

Assignment 2

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Roll (n)	age (x)	$\bar{x} (\frac{\sum x}{n})$	
1	23	$\frac{324}{15} = 21.6$	
2	22		
3	21	$x - \bar{x}$	$(x - \bar{x})^2$
4	22		
5	21	$23 - 21.6 = 1.4$	1.96
6	20	0.4	0.16
7	21	-0.6	0.36
8	22	0.4	0.16
9	22	-0.6	0.36
10	22	0.4	2.56
11	22	-0.6	0.36
12	22	0.4	0.16
13	21	-0.6	0.16
14	22	0.4	0.16
15	22	-0.6	0.36
		0.4	0.16
		0.4	0.16

$$MD = \frac{4.2}{15} = 0.613$$

$$\sigma^2 = \frac{7.6}{15} = 0.507$$

$$SD = \sqrt{0.507} = 0.712$$

$$CV = \frac{0.712}{21.6} \times 100 = 3.296\%$$

① a) Arithmetic Mean = $\frac{324}{15} = 21.6$

⑤ Geometric mean = $\sqrt[15]{7650720} = 2.887$

c) Harmonic mean = $\frac{n}{\sum (\frac{1}{x})} = 21.644$

② Median = $\frac{15+1}{2} = 8$
age = 22

③ mode = 22