

2/5/2017

§2.2 MEASURES OF CENTER2.1

(a)



"CENTER" LOOKS AROUND 2

$$(b) \text{ MEAN} = \frac{0 + 1 + 1 + 3 + 5}{5} = \frac{10}{5} = 2$$

$$\text{MEDIAN} = \text{DATA IN MIDDLE POSITIONS}$$

0 1 ① 3 5

$$= 1$$

$$\text{MODE} = 1 \quad (\text{MOST FREQUENT MEASUREMENT})$$

(c) MEDIAN < MEAN → SKewed RIGHT

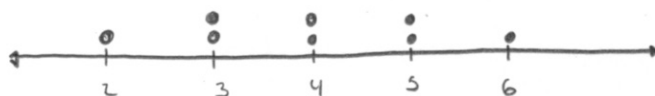
$$\underline{2.2} \quad (a) \quad \bar{x} = \frac{3 + 2 + 5 + 6 + 4 + 4 + 3 + 5}{8} = \frac{32}{8} = 4$$

$$(b) \quad m: \quad 2, 3, 3, \boxed{4, 4}, 5, 5, 6$$

MIDDLE

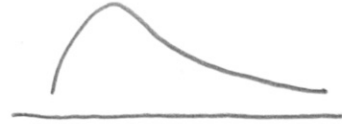
$$m = 4$$

(c) SYMMETRIC



2.5

(a) I SEE MOSTLY 0's & 1's , JUST A FEW 2's & 3's
SO I'LL SAY SKEWED RIGHT.



(b) GUESS OF MODE: 1

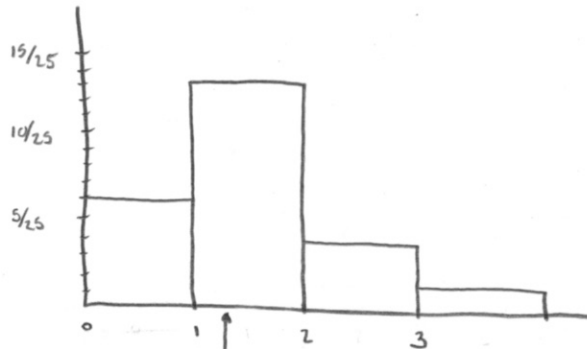
$$(c) \text{ MEAN} = \frac{6(0) + 13(1) + 4(2) + 2(3)}{25} = \frac{27}{25} = 1.08$$

MEDIAN : MEASUREMENT IN THE $\frac{n+1}{2} = \frac{25+1}{2} = 13^{\text{TH}}$
POSITION

$$m = 1$$

$$\text{MODE} = 1$$

(d)



MEAN 1.24

MEDIAN 1

(YES , SKEWED RIGHT ($m < \bar{x}$)
& MODE = 1)

2.8 (a) $\frac{12.55}{14} = \underline{\underline{0.896 \dots}}$

(b) MEDIAN = AVERAGE OF 7TH & 8TH MEASUREMENT
(WHEN ORDERED LEAST TO GREATEST)

$$= \frac{.67 + .69}{2} = \underline{\underline{0.68}}$$

(c) $m < \bar{x}$ — SKewed RIGHT

2.9 I'D CHOOSE MEDIAN BECAUSE IT IS LESS SENSITIVE
TO INFLUENCE FROM OUTLIERS ('SPORTS SUPERSTARS' WITH
"ASTRONOMICAL SALARIES").