

ANALYZING DATA

CENTER SPREAD SHAPE

DEF

MEASURE OF CENTER: A SINGLE NUMBER DESCRIBING HOW A DATA SET LOOKS IN THE MIDDLE

- 1) MEAN - AVERAGE ☹️
- 2) MEDIAN - MIDDLE # WHEN DATA IS IN ORDER
- 3) MODE - # OR #'S THAT APPEAR MOST

EXAMPLE: 9, 2, 3, 2, 4, 6, 7, 7

2, 2, 3, 4, 6, 7, 7, 9

1) MEAN - ADD ALL #'S + DIVIDE BY # OF #'S

$$\frac{2+2+3+4+6+7+7+9}{8} = \frac{40}{8} = \boxed{5}$$

2) MEDIAN - MIDDLE

$$2, 2, 3, \boxed{4}, \boxed{6}, 7, 7, 9 \quad \frac{4+6}{2} = \frac{10}{2} = \boxed{5}$$

3) MODE - $\boxed{2, 2}, 3, 4, 6, \boxed{7, 7}, 9 \quad \boxed{2 + 7}$

YOU TRY:

1) ~~3, 5, 13, 6, 1, 2, 3, 2, 1~~ 1, 1, 2, 2, 3, 3, 5, 6, 13

MEAN

$$\frac{1+1+2+2+3+3+5+6+13}{9}$$
$$\frac{36}{9} = \boxed{4}$$

MEDIAN

1, 1, 2, 2, 3, 3, 5, 6, 13

$$\boxed{3}$$

MODE

$$\boxed{1, 2, 3}$$

2) 100, 111, 122, 133, 144, 155, 166

MEAN

$$\frac{100+111+122+133+144+155+166}{7}$$
$$\frac{931}{7} = \boxed{133}$$

MEDIAN

$$\boxed{133}$$

MODE

$$\boxed{\text{NONE}}$$

3) ~~84, 140, 105, 119, 105, 84, 105~~

84, 84, 105, 105, 105, 119, 140

MEAN

$$\frac{84+84+105+105+105+119+140}{7}$$
$$\frac{742}{7} = \boxed{106}$$

MEDIAN

$$\boxed{105}$$

MODE

$$\boxed{105}$$