

# Math Attack

A review of chapters  
11 and 12 in which  
you destroy your  
enemies.

# THE RULES

1. A review question will be given. All the groups work together to solve the question.
2. ONE group chosen at random will answer the question.
3. If they get the question correct, they get to “attack” 2 different people (lop off a limb).
4. If they get the question wrong, Mrs. Dimock attacks their person and then gives another group a chance to answer that question. Repeat
5. Once a person is attacked 10 times, it is mortally wounded. ***BUT*** that team is still in the game so if they get a question right they can still attack other groups’ persons and get revenge.
6. When only 2 people remain, students may only attack one person.

## **Question 1**

**Determine the mean of the following data set**

**{22, 18, 38, 6, 24, 18}.**

$$126 \div 6 = 21$$

## **Question 2**

**Find the median and mode  
for the set of data**

**heights of buildings in feet:  
35, 42, 40, 25, 42, 54, 50**

~~25~~ ~~35~~ ~~40~~ (42) ~~42~~ ~~50~~ ~~54~~

Median: 42

Mode: 42

## Question 3

Daily Exercise	Minutes
Pull-ups	8
Push-ups	10
Running	38
Sit-ups	?
Weightlifting	20

The table shows the number of minutes spent doing different exercises. The mean time spent exercising was 18.2 minutes.

How many minutes were spent doing sit ups?

$$18.2 \times 5 = 91$$

$$91 - (8 + 10 + 38 + 20) =$$

$$91 - 76 = 15$$

15 min for sit ups



## Question 4

For the data set, find the median, the first and third quartiles, and the interquartile range.

texts per day: 24, 53, 38, 12, 31, 19, 26

~~12~~ ~~19~~ ~~24~~ 26 ~~31~~ ~~38~~ ~~53~~

Median: 26

$Q_1: 19$       $Q_3: 38$

$IQR: 38 - 19 = 19$

## Question 5

The data below shows the recorded speeds of several cars on a busy street.

**35 38 41 35 36 55**

Calculate the **mean absolute deviation**.

Round to the nearest hundredth if necessary.

$$35 + 38 + 41 + 35 + 36 + 55 = 240 \div 6 = 40$$
$$5 + 2 + 1 + 5 + 4 + 15$$

Mean = 40

$$\frac{32}{6} = 5.\overline{3} \approx 5.33 \text{ mph}$$

5.3333

## Question 6

The number of songs downloaded per month by a group of friends were

8, 12, 6, 4, 2, 0, and 10.

1. Find the measure of center that best represents the data.
2. Justify your selection then find the measure of center.

Mean because there  
are no outliers, no  
identicals.

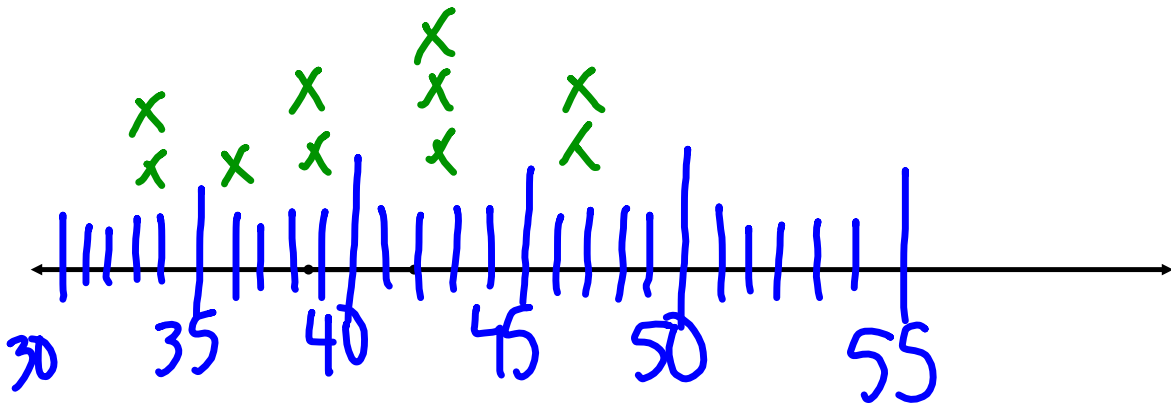
$$\frac{42}{7} = 6$$

## Question 7

Make a line plot for the set of data. Then describe the data.

{36, 43, 39, 47, 34, 43, 47, 39, 34, 43}





$$\text{Mean: } 405 \div 10 = 40.5$$

$$\text{Mode: } 43$$

$$\text{Median: } \frac{39 + 43}{2} = 41$$

$$\text{Range: } 47 - 34 = 13$$

10 pieces of data.  $\frac{1}{2}$  greater than 41

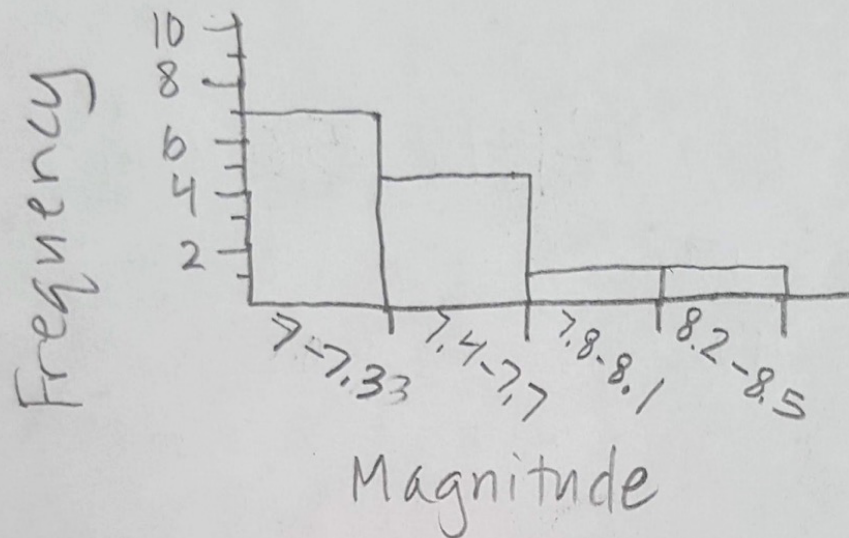


## Question 8

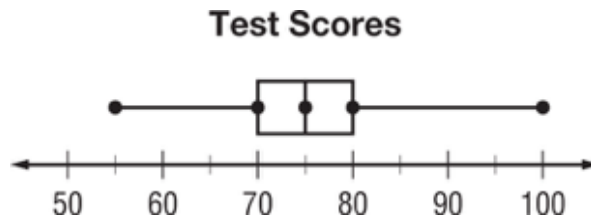
Major Earthquakes	
Magnitude	Frequency
7.0 – 7.3	7
7.4 – 7.7	5
7.8 – 8.1	1
8.2 – 8.5	1

Draw a histogram to represent the frequency of each interval.

# Major Earthquakes



## Question 9



1. What is the interquartile range of the data?
2. What are the third and first quartiles of the data?
3. What percent of students scored at least 70 on the test?
4. Is the data symmetric? Explain.
5. Which measure would you use to describe the center of the data?
6. Which measure would you use to describe the spread of the data?

1.  $80 - 70 = 10$

2.  $Q_1 = 70$     $Q_3 = 80$

3.  $70 = 25\%$ ,    $75\%$

4. No, the quartiles are equal.

But the lower extreme to 1<sup>st</sup> quartile  
is less, than the 3<sup>rd</sup> quartile to  
upper extreme. (Right side more spread out)

5. Median

6. IQRge

