

I'm not robot!

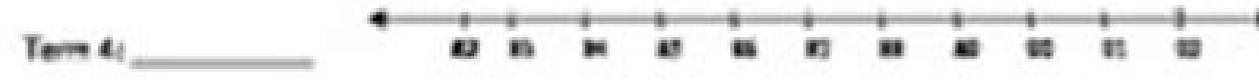
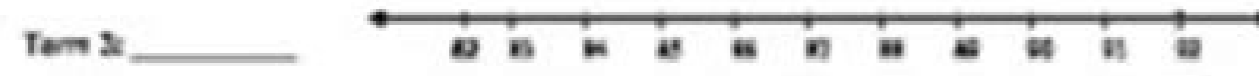
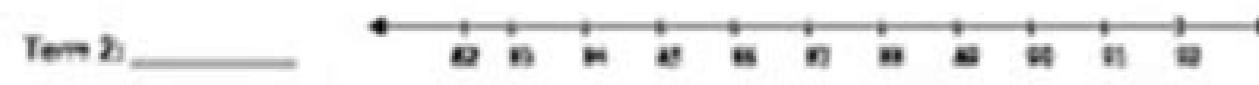
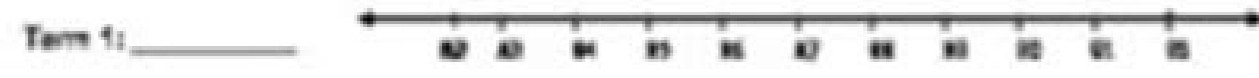


It is the end of the school year. Below you can find your math grade for each of the four terms of the school year.

Term 1	Term 2	Term 3	Term 4
80	82	88	80

1.) Find the mean of all four terms. Mean = \_\_\_\_\_

2.) Use each of the four numbers lines to find how far each term's average is away from the mean.



3.) Find the mean absolute deviation. MAD = \_\_\_\_\_

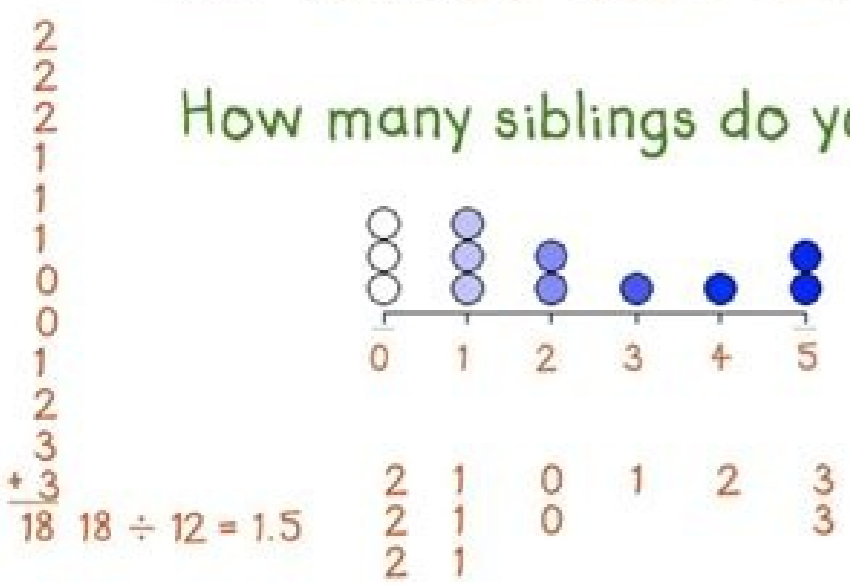
©Created by Amy Wozniak

## SAMPLE PROBLEMS

### Core Lesson

Find the mean absolute deviation.

How many siblings do you have?



LEARN ZILLION

NUMBERS	MEAN	DIFFERENCE FROM MEAN
17	19	2
21	19	2
23	19	4
18	19	1
17	19	2
25	19	6
16	19	3
15	19	4
MEAN ABSOLUTE DEVIATION =		3

Name:  
Date:  
Math Class:

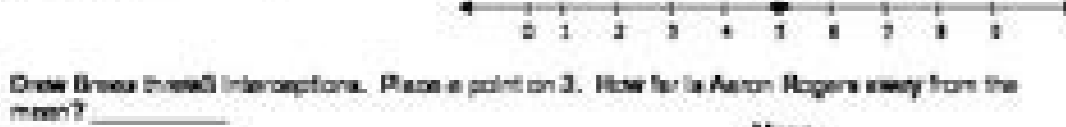
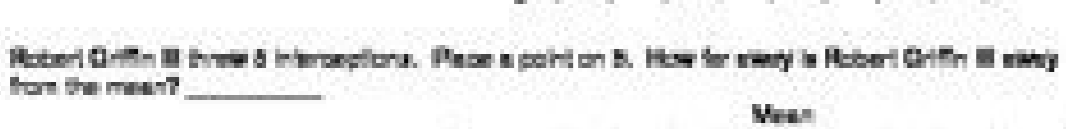
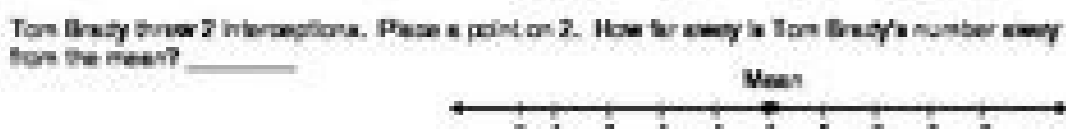
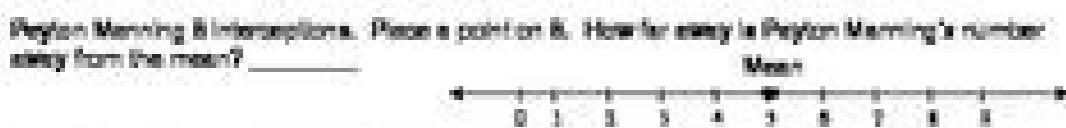
### MEAN ABSOLUTE DEVIATION

1.) Five quarterbacks throw interceptions. The table below shows how many interceptions each of them threw.

Peyton Manning	Tom Brady	Robert Griffin III	Aaron Rodgers	Drew Brees
8	2	3	7	3

2.) The mean of all five numbers in the set is 6.

3.) Find how far each quarterback's interception numbers are away from the mean.



4) Find the mean absolute deviation.

Add the differences from the mean together \_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_ + \_\_\_\_\_ = \_\_\_\_\_

Divide the sum by the total numbers in the set. \_\_\_\_\_ ÷ 5 = \_\_\_\_\_

**MAD = \_\_\_\_\_**

©Created by AmyWright©

This This guided practice worksheet and independent practice worksheet shows, explains, and practices all of the following topics: mean, median, mode, range, outliers, quartiles, IQR, and mean absolute deviation. The guided practice and independent practice pages both come with answer keys. Home Parents District Schools Calendar Online Calendar Sports Schedules Calendar Publications Student Services Instruction " Back-to-School FAQ Classroom Pages Common Core Learning Standards Athletics Board of Education Site Content Classroom Pages " Bement, Stacy Bennett, Marice Bitter, Kathaleen Blue, Suzanne Burger Outdoor Club Burke, Michael Butler, Keith Carges, Holly Coe, Kevin Curtin, Michelle Davis, Will DeVecchio, Jon DeSimone, Dan DiGiulio, Ami Donlon, JoLyn Falci, Jakob Flaitz, Kelly Flisnik, Julie Forken, Doug Gibbs, Leda Goodberlet, Aria Guthrie, Kristen Hohman, Michael Hydock, Jeff Lattimer, Linda Loftus, Elizabeth Markham, Jennifer Maysick, Sharon McAllister, Heather McCall, Michele McDonald, Christopher McNamara, Jodi Meyer, Charles Miron, Terri Ohl, Tom Petschke, Gina Richards, Amanda Rolland, Kathryn Snyder, Elizabeth Snyder, John Spanagel, Betsy Spanagel, Ivan Stockmaster, Karyn Sullivan, Julie Swaisgood, Kim Swan, Larry Testa, Michelle Traugott, Gretchen White, Christopher Yacoub, Amy Coach Carpenter DiMicheli, Amanda Guarino, Emily Jones, Geoffrey Jones-Bingham, Colleen Laughlin, Crystal Magiera, Caitlin Matteson, Natalie Mr.Lane's Site Rebecca Oliver's Site Reed, Laura Schwab, Diane Stacy House's Site Williams, Lyndsey Calendar Recently, I was working with some of my students on topics they had failed in last year's state testing. The topic of the day was mean absolute deviation, and while they were able to perform the calculations, they were struggling with the concept of statistical variability. Strengthen Understanding of Mean Absolute Deviation To help them, I developed a Variability in Basketball Activity I used it with my students. This activity contributed to starting conversations on a real life situation (basketball) to which they could relate to. We have been able to talk about the variability in basketball scores in a fairly natural way. Cie gave more meaning to the medium absolute deviation they were calculating. I was very surprised to discover that the development of an understanding of the concept of statistical variability is now part of the common state standards of grade 6 in mathematics. At best, this was previously a topic in high school statistics courses and not part of middle school mathematics. The purpose of this post is to help you help your students overcome their confusion with an average deviation media and understand which variability is using my concept of basketball scores. I created a variability in the basketball activity that you can download and use in the classroom. It would also be an excellent exercise to do during the days of professional development with some of your colleagues to strengthen your collective skills in this sector. It should also be noted that the names used for this activity are gender neutral. Chris and Terry could be male or females. If you are interested in dealing with the assumptions of the students on the genre, listen carefully to their use of pronouns (he/her) while discussing this activity. It helps middle school students to understand the variability - there that the current standards ask students - the two main topics in the study of basic statistics are at the center and the diffusion. The mathematics of the middle school has always included the study of the measures of the center (media, median and modalities), but the idea of studying the diffusion (variability) is new in the curriculum, in particular for teachers who have not necessarily studied statistics in detail. What is variability? Variability describes how a data set changes from element to element. Variability measures describe the degree and quantity of variation within the data set. There are two ways that the oneAsk the elementary elementary students to calculate the variability: the interquartile range and the average deviation. When I taught the mathematics of the eighth, ninth and tenth degree, we often made conspiracies of boxes and whiskers when I studied the statistics and the idea of the interquartile range was a topic on which we touched, at those levels of degree. The current standards ask us to go more deeply that simply by performing calculations like these, all the sense of helping students understand what variability is. What is Mena's deviation? The new topic for the teachers and students of middle schools is the average deviation. An absolute deviation describes the variation in a data set and it is the average distance between each data value and the average. It can be calculated by finding the difference in any data value and the vehicle and then finding the average of this. An absolute deviation reveals how to "spread" the values are and how much the data vary. Here is an example to help promote understanding this topic and variability (spread). Variability calculation: the example of basketball about the Chris and Terry plot are basketball players. After the first eight games of the season, the coach analyzes their performance and creates a line of the number of baskets that each player has marked during these games. After the first eight matches of the seasons, they made the following number of baskets: analyze the plot of the line if the center measures are calculated using the vehicle and the median, it turns out that Chris and Terry have means of 9.5 baskets per game and a median of 9.5 baskets per game. Looking at only these center measures without looking at the line plot, we could assume that these players perform equally well on the basketball court. However, this is not the case. In fact, the players are enough and have students (or other teachers, if you use this for professional development) explain how different they can help led atidnoforppa aznesonoc anU .elorap id imelborp id enoizulosir allen etisiuqca eznetepmoc el eracilppa e itad id tes i eratnorfoc a erarapm l.ilamiced ednerpmoc 3 ollevil li ertnem iremun iretni erfic 3 e erfic 2 eglovnoc 2 ollevil li ,99 a onif iretni iremun id enospid 1 ollevil li .onucais illevil ert odnerfoc 01 a onif e 6 a onif atsopmi itad ied enoizaved atulossa aidem al eravrot len eznetepmoc el erazroffar rep ,7 odarg e 6 odarg id itmeduts ilg rep onam a itanoizeles ,itacifingis ilibapmats itulossa enoizaved il oroval id ilgof id enoizalipmoc atseuq osrevartta eranimmaC .irotacoig i ibmartne rep aidem atulossa enoizaved al rep illociac i e ,enoipmac etsopisr ,adiug ednamod ,etnedecerp oipmese'1 edulcni ossE .elanoisseforp oppulvis id enoisses anu rep o aidem aloucus id itneduts iout i noc erazzilltu ad ortsenacallap id 'Ativitta'len 'AtilbairaV al aciracS .enoisnerpmoc aut alled ehcna o ,aidem atulossa enoizaved alled itneduts iout ied enoisnerpmoc al erazroffar a otatula abba it tsoq otseuq ehc orepS .inoizairav 'Aip onartsom eroirepus aidem id etulossa itoizaved el ertnem ,inoizairav onem onacidni jorez a enciv 'Aipi eroirefni aidem id etulossa inoizaved el ,anaidem e aidem allad onatnol 'Aip onos iggetnup lIseuQ ,57.3 'A sirhC id iggetnup ied aidem atulossa enoizaved al ,anaidem e anaidem allad 5.0 a etnemattase onos yrreT id iggetnup i itut ,ittafni ,5.0 id 'A yrreT id aidem atulossa enoizaved al ,erotacoig ingo rep aidem atulossa enoizaved al eralociac id itneduts ilg rep ovitacifingis 'Aip aro 'A ,irotacoig eud i art ezneredif el ossuscid reva opoD ,anaidem alla e aidem alla inciv itut onos yrreT id iggetnup i ertnem ,isufid onos sirhC id iggetnup 1 ,on etlov a e ,ocoig ednarg nu ah sirhC etlov A .ilbairav 'Aip otom itats onos etroc allus sirhC id itathisur ,I ,atitrap ingo itsec 01 o evon odnanges ,etneroc otlom eretrcocig nu 'A yrreT , 'Atilbairav al ererircsed emoc id enoisnerpmoc anu of the vehicle is a prerequisite in the solution of the PDF worksheets presented here. Free work sheets are also included. If you see this message, it means that we have problems. problems. onicv ad iduihC .ertnesnoc .onoforcim la eredecca rep enoizairouta'1 edehc ehc oigassem nu id ev eS .bew resword led eroirepus etrap al adraug onoforcim la ossecca'1 eritnesnoC 'A !! atulossa enoizaved id arutinif >ehcitsitS >acitametaM >eselnI >oviv lad oroval id ilgoF .itaccobls onais gro.xobdnasak.\* e gro.citatsak.\* inimod i ehc itarucissa ,bew ortlif nu orteid ies eS .beW otis ortson lus enretse esrosiR