

# MATH STUDY GUIDE UNIT ONE PLACE VALUE.

~ Goal; understand and use a place value chart through one million place.

millions	hundred thousands	ten thousands	thousands	hundreds	tens	ones
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~ What is the value of an eight in the ten thousands place? [80,000]

~ What is the written form for the numeral 1, 929, 390?

[one million, nine hundred twenty nine thousand, three hundred ninety]

~ What is the standard form of the above number? 1, 929,390

~ What is the expanded form?  $1,000,000 + 900,000 + 20,000 + 9,000 + 300 + 90$

~ Can you tell the expanded form, word form, and standard form of a number that goes through the millions place?

Example: 4,590,457 (this is standard form)

Expanded form:  $4,000,000 + 500,000 + 90,000 + 400 + 50 + 7$

Word form: four million, five hundred ninety thousand, four hundred fifty-seven

~ Do you know the names of the places and their values? (You need to be able to apply this information.)

1,000,000 (Millions,) 100,000 (Hundred Thousands,) 1,000 (Thousands,)

100 (Hundreds,) 10 (Tens,) 1 (Ones.)

~ Do you know the difference between an odd number (1, 3, 5, 7, 9) and an even number (0, 2, 4, 6, 8)?

~ Can you compare numbers?

$235,102 > 234,102$

$2,058,385 < 2,058,435$

Greater than/less than statements:

$24,993 > 24,889$

What is the true statement?  $83,039 < 12,394$  OR  $82,483 > 66,493$

~ Can you analyze a number and determine what it is closest to without a number line?

~ Can you use a rounding strategy such as that listed below to round to a specific place?

What is 8,035 rounded to the nearest ten? (8,040)

What is 3,492,045 rounded to the nearest million? (3,000,000)

~ Can you look at a rounded number and determine which number would round to that number? Can you *clearly* explain your reasoning for the choice you made?

Example: Which of these would round to 3,200? *How do you know?*

3,104 3,254 3,120 3,183

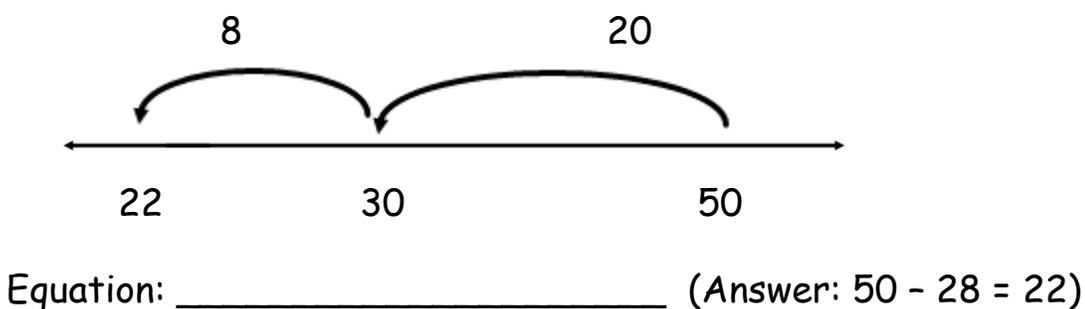
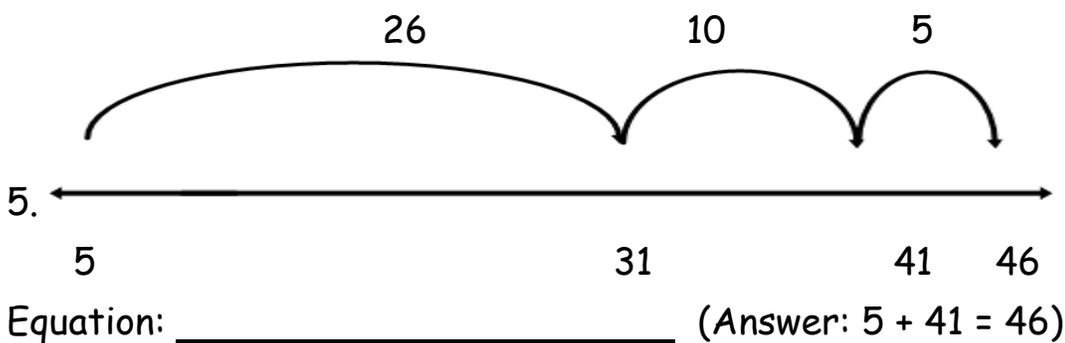
~ Can you use estimation to solve problems involving sums (addition) and differences (subtraction)?

~ Can you find the closest estimate by rounding to a lesser place instead of to the greatest place? (See example below.)

$$245,468 + 521,875 =$$

$$250,000 + 520,000 = 770,000$$

Number lines. *What problems are being modeled by these number lines?*



**Properties:** a rule that applies to many things

**Commutative Property of Addition**

The order in which the numbers are added does not change the sum.

**Associative Property of Addition**

The way which the numbers are grouped when added, does not change the sum.