

## Week 3 Pre-Algebra Assignment:

Day 1: pp. Chapter 1 test

Day 2: pp. 47-49 #1-22, omit #11, pp. 53-54 #1-18

Day 3: Properties worksheet

Day 4: pp. 57-58 #1-27, 35-44

Day 5: pp. 61-62 #1-43 odd, 47-56

## Notes on Assignment:

### Chapter 1 Test:

What's on the test:

- Finding opposites and additive inverses
- Comparing numbers
- Simplifying absolute value
- Adding, subtracting, multiplying and dividing integers
- List the order of operations
- Apply the order of operations to simplify expressions
- Scientific notation

### Pages 47-49: (#1-22)

#### **Work to show:**

All problems:: Answers only

#5-10: These are all listed on the top of page 47.

#12-15: Remember the illustration I gave in class. Let's say I want to see if the set of integers is closed for addition. Imagine a room filled with integers. Can I "close" the door and be happy doing addition because all of my answers are also in the room? If so, then we say the set of integers is closed for addition. If I need to open the door to let an answer in, then it's *not* closed.

For another example, let's say I fill my room with integers again, but this time try doing division. I would *not* be able to close the door, because I need more numbers if I'm going to do divide. For example,  $3 \div 6 = 1/2$ , but  $1/2$  is *not* in the room since it's *not* an integer. I'd have to leave the door open for a  $1/2$  to come in. Thus we say that the set of integers is not closed for division.

#16-22: Sometimes it's helpful to ask "What changed from one side to the other?" Was it the grouping? (Associative) Was it the order? (Commutative) Was there an identity involved?

Pages 53-55: (#1-18)

**Work to show:**

All problems:: Answers only

#1-18: Sometimes it's helpful to ask "What changed from one side to the other?" Was it the grouping? (Associative) Was it the order? (Commutative) Was there an identity involved?

Properties Worksheet

**Work to show:**

All problems: Answers only

Pages 57-58: (#1-27, 35-44)

**Work to show:**

#1-10: Answers only

#11-18: Show the expression with the ( ) cleared and then simplify if possible.

#19-27: Answers only

#35-44: Answers only

#11-14: These problems will simplify to a single number.

#19: Multiply the 5 times 10 and then the 5 times 4 and add the two products.

#20: Go backwards on the Distributive property. Take 4 times the sum of  $(7+3)$ .

#25: Be careful with the negative. When you multiply to clear the ( ), you can either write the symbol between the two terms as "+-" or just "-" if you want.

Pages 61-62: (#1-43 odd, 47-56)

**Work to show:**

#1-43: Write down the expression, substitute the value given, and then simplify.

#47-50: Show work as needed.

#51-56: Answers only.

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#1-19: Most of these are single operations, but if there is more than one operation, make sure that you follow the order of operations.

#21: You must do the multiplication in the numerator before you divide by 2.

#23: Remember to do the division first before the subtraction, since division comes before subtraction in the order of operations.

#33-39: The division bar is a grouping symbol. Simplify the numerator and denominator separately down to single numbers, and then simplify the final fraction if possible.

#41-43: These are tough, so take your time!

#47-50: You can use our rules for exponents, or just use the meaning of exponents to expand the expressions.

#48: Write this division problem as a fraction first.