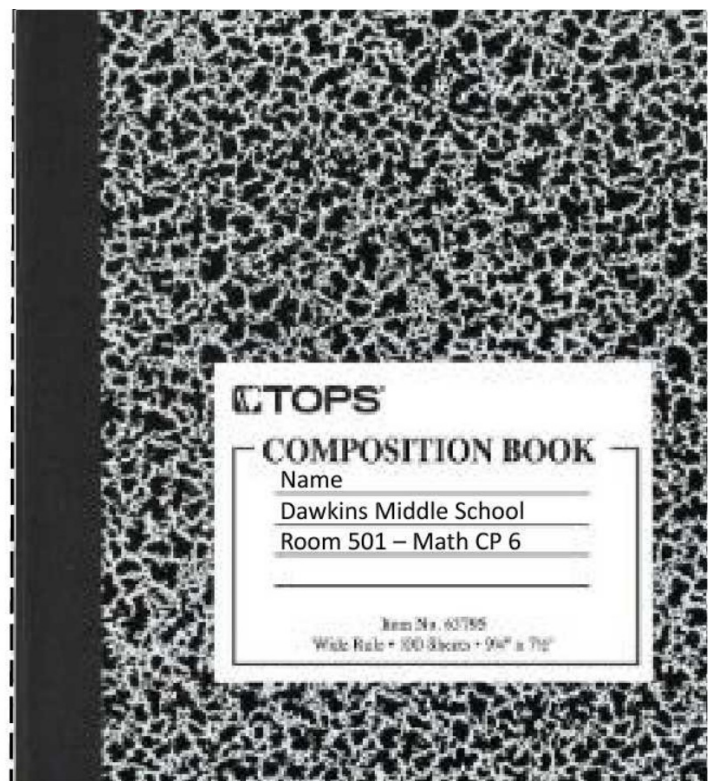


Use  
permanent  
marker on  
cover

Name  
Dawkins Middle School  
Room 501 – Math CP 6

Instructions in **RED** are not to be copied

**Pages without lines are notes in class  
(NOT to copy into notebook)**





## Resources & Passwords

Mrs. Darstein Room 501      Planning Periods: 1 and 6  
 Dawkins Middle School  
 1300 East Blackstock Road  
 Moore, SC 29369      Tutor Times: 7:30 – 8:00 am  
 864-576-8088 x 6071      3:00 – 3:30 pm  
 Website – [www.darstein.weebly.com](http://www.darstein.weebly.com)  
 Email – darsteinm@spart6.org

Calculator Number: # \_\_\_\_\_ Computer #: \_\_\_\_\_

Program or Website	Username	Password
Computer Log in		
District 6 email		Dormangmail (reset after 1 <sup>st</sup> log in)
Google Classroom		
ItsLearning		
MathiaX (Carnegie)	Glue in from Mrs. Darstein	
Prodigy Math		
Reflex Math		
Star Testing		
Sumdog		
USATestPrep	bearcats88	firstname.lastname
	bearcat	

## Module 2 - Topic 2 - Percent

01/07/19 - 2.2.1 - Percent, Decimal, Fractions pg. 52-53  
01/08/19 - 2.2.2 - Benchmark Percents pg. 54-55  
01/09/19 - 2.2.3 - Part and Whole pg. 56-57  
01/10/19 - 2.2.1-2.2.3 Wrap up

## Module 2 - Topic 3 - Unit Rates & Conversions

01/11/19 - 2.3.1 - Converting Units pg. 58-59  
01/14/19 - 2.3.2 - Unit Rates pg. 60-61  
01/15/19 - 2.3.3 - Multiple Unit Rate Representations pg. 62-63  
01/16/19 - 2.3.1-2.3.3 Wrap up

Assessment - 01/17/19 Topic 2 and Topic 3

Calculator # \_\_\_\_\_

You will be using your calculator EVERY day for  
Topic 2 and Topic 3 - Pick it up as you enter class.

49

## Module 2

Topic 2  
Percents

Topic 3  
Unit Rates  
&  
Conversions

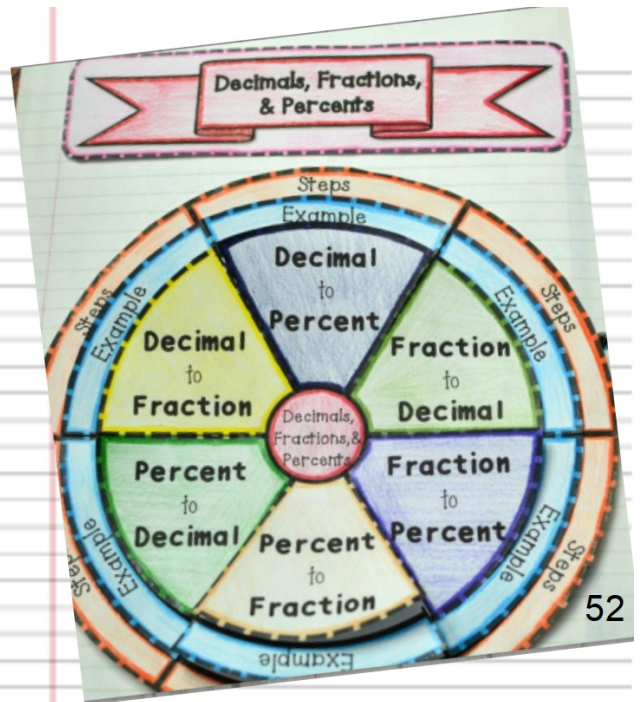
50

2.2.1 - Percent, Decimal, Fractions p.109

I can write equivalent fractions, decimals, and percents.

I can model percents on a 100 grid.

51



52

2.3.2 - Benchmark Fractions p. 123

I can place fractions, decimals, and percents in order.  
I can estimate percents using benchmarks.

Benchmark Percent - a percent that is commonly used, such as 1%, 5%, 10%, 25%, 50%, and 100%.

1. Copy notes on page 53 (not red)
2. Complete 1.1 pages 111-115 in textbook
- Use your group for questions and calculator
3. Glue insert on page 54 - complete chart
4. Mathia - C.1 Percents 8 all four workspaces

**BENCHMARK PERCENTS**

Percent	Decimal	Fraction	Method	Example
100%	1.0	$\frac{1}{1}$	The Whole Amount	100% of 14 is <u>14</u>
50%	0.5	$\frac{1}{2}$	Half of the whole	50% of 60 is <u>30</u> $60 \div 2$
25%	.25	$\frac{1}{4}$	Divide the whole by 4	25% of 40 is <u>10</u> $40 \div 4$
10%	.10	$\frac{1}{10}$	Divide the whole by 10 or move decimal 1 place to left	10% of 135 is <u>13.5</u> <u>135</u>
5%	.05	$\frac{1}{20}$	Half of 10% of whole	10% of 240 is <u>24</u> so 5% of 240 is <u>12</u>
1%	.01	$\frac{1}{100}$	Move decimal 2 places to the left	1% of 234 is <u>2.34</u> <u>234</u>



## Reminder

bar notation can be used to represent a decimal that repeats.

$$\text{Ex: } \overline{.3} = .3333333333333333333333333333\dots$$

$$\overline{.321} = .32132132132132132132132132\dots$$

$$\overline{.32\bar{1}} = .321111111111111111111111\dots$$

Calculators will ROUND a repeating decimal off to 9 digits.

2.2.3 Part & Whole p. 137

I can solve percent problems using ratios.

Memorize

$$\frac{\text{is}}{\text{of}} = \frac{\%}{100} = \frac{\text{part}}{\text{total}}$$

Ex: 25% of what is 37:

55

$$\frac{\div 25}{100} = \frac{\div 37}{x}$$
$$100 \times 37 \div 25 = 148$$

What % of 68 is 12?

$$\frac{x}{100} = \frac{12}{68}$$

$$100 \times 12 \div 68 = 17.64705882$$

17.6

Part/Total

In a school with 900 students 300 are Clemson fans. 56

What % are Clemson Fans?

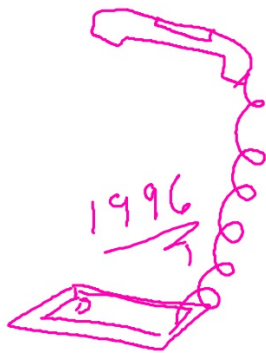
$$\frac{300}{900} = \frac{x}{100}$$

$$300 \times 100 \div 900 = 33.333333$$

33.3%



Percent  
can  
be OVER  
100%  
Example



1990 → 1000 cellphone

1996 → 5000 cellphones

What % increase

$$\frac{\text{part}}{\text{total}} = \frac{\%}{100}$$

$$\frac{4000}{1000} = \frac{\%}{100}$$

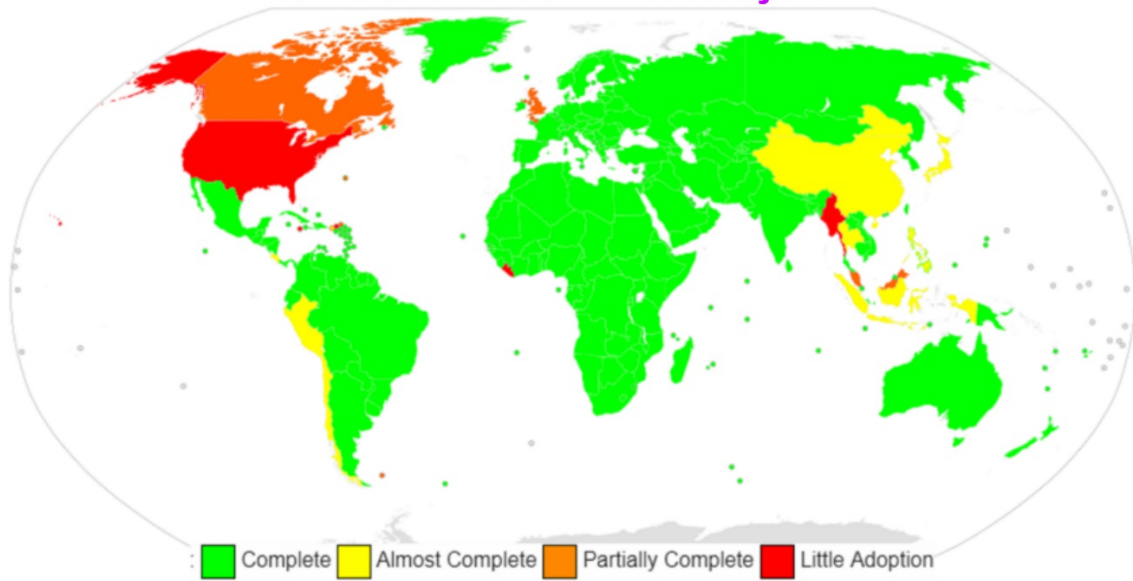
400%

## Today's Choices 1/10

Textbook p 126-131	Skills p. 3 III A and B	Choose 1 Blue
page 155 #3 a-h	Skills Page 4 III C and IV B	Choose 1 Red

**DO NOT COPY into ISN**

**Countries that use the metric system**



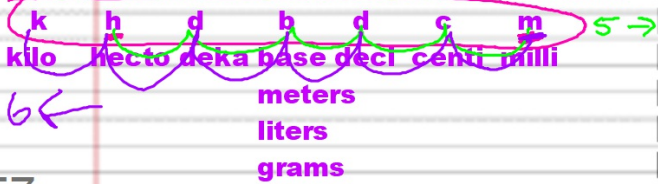
**Do not copy into ISN**

2.3.1 Ratios for Converting p.165

I can convert units using double number lines, tables, and scaling.  
 Convert -to change a measure to different units.

**THE METRIC SYSTEM**

King Henry died by drinking chocolate milk.



57

Ex  $1.623 \text{ km} = 162300 \text{ mm}$   
 $1.623000$

Ex:  $30 \text{ mm} = \text{---} \text{ km}$

$000030$

English & Metric Units of Measure

<p><b>Length</b></p>	<p>Length</p> <p>1 foot = _____ inches                  1 yard = _____ feet                  1 mile = _____ feet</p> <p><b>meters</b></p>
<p><b>mass/capacity</b> <b>Weight</b></p>	<p>Weight</p> <p>1 pound = _____ ounces                  1 ton = _____ pounds</p> <p><b>grams</b></p>
<p><b>Liquid Volume</b></p>	<p>Liquid Volume</p> <p>1 cup = _____ ounces                  1 pint = _____ cups                  1 quart = _____ pints                  1 gallon = _____ quarts</p> <p><b>liters</b></p>

**Late assignments - Q3**

**"1" in grade book.**

**Two weeks to make up!**

Homework problem Monday, 1/15 p.183 #3

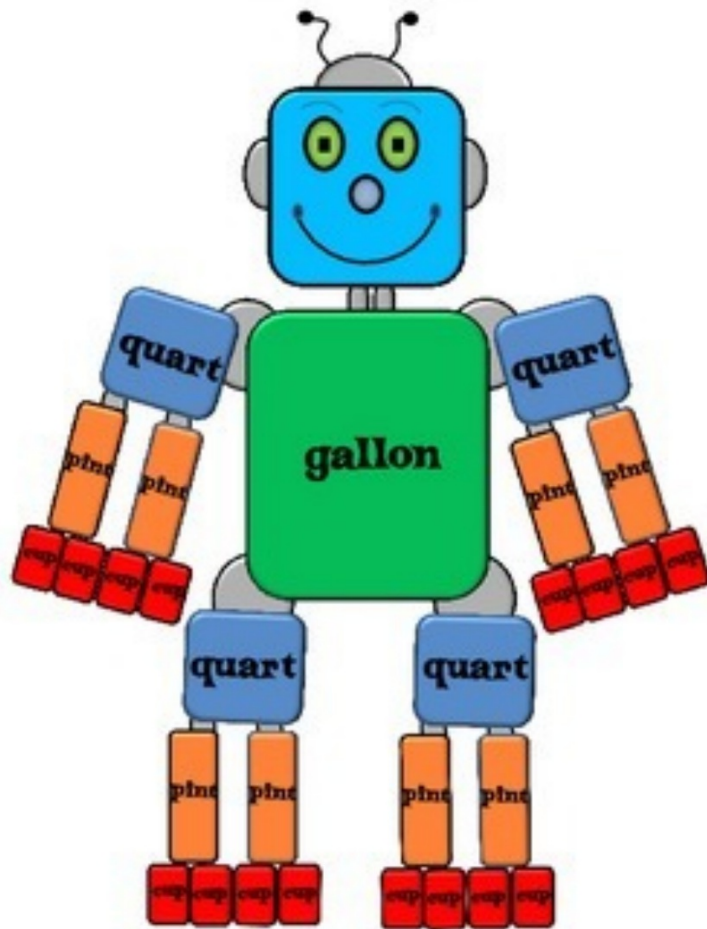
2. Jonah is going to the hardware store for his Uncle Frederick. He needs to buy 4 yards of electrical wire and 14 quarts of liquid nails.
- a. The store only sells wire by the foot. How many feet does Jonah need?
  - b. The store only sells liquid nails by the gallon. How many gallons does Jonah need?

The diagram shows a stick figure on the left holding a roll of wire labeled 'a' and a bucket labeled 'b'. To the right of the figure is a large blue oval containing a conversion calculation. Inside the oval, a fraction is written:  $\frac{1 \text{ gal.}}{4 \text{ qts}}$ . To the right of this fraction is the text '14 quarts =  $\frac{14}{4}$  gallons'. Below the oval, the calculation  $\frac{14}{4} = \frac{7}{2} = 3\frac{1}{2}$  is written, with the final result  $3\frac{1}{2}$  circled.

$$\frac{14}{4} = \frac{7}{2} = 3\frac{1}{2}$$



# Gallon Man



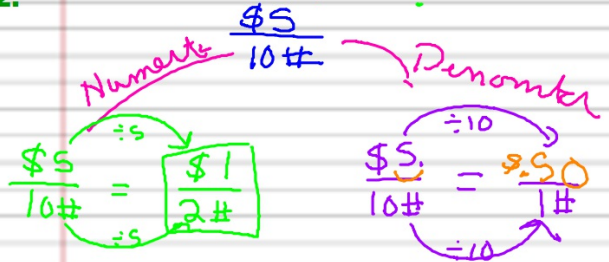
2.3.2 Unit Rates p. 185

I can find unit rates and use them to compare ratios.

**Unit Rate** - a comparison of two measurements where the numerator or denominator is 1.

EX1:  $\frac{1 \text{ book}}{5 \text{ students}}$  unit  ~~$\frac{\$10}{3 \text{ gallons}}$~~   
 $\frac{\$16.50}{1 \text{ download}}$  unit

Ex 2: \$5.00 for 10 pounds



\$1.89

\$2.64  $\star 16$

$\frac{1.32}{8} = .165$

$\frac{\$2.67}{16}$

$\frac{2.67}{16} = .166875$

extra credit - due by 1/22 - email, remind, or show me pictures of 2 labels (same product/ different size) that show the smaller size is cheaper.



532140

Classwork - Complete Unit rate Maze - Mathia C1. Rate Reasoning 8

**Module 3 - Determining Unknown  
Quantities**

**3.1 - Expressions**

**3.2 Equations 3.3 Graphing**

1/24 - intro to squares & cubes p.63-64

1/25 - Expressions - p. 65-66

1/28 - Equations - p. 67-68

1/29 - More equations

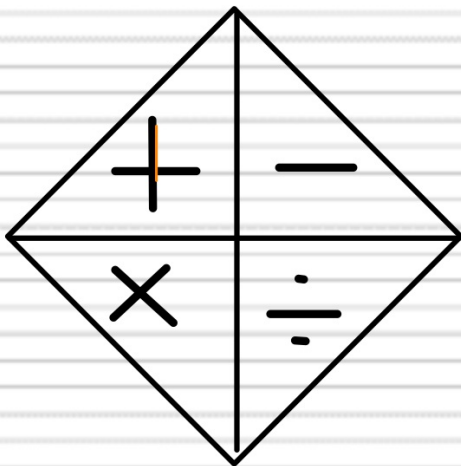
1/30 - Graphing p. 69-70

1/31 - Assessment on Module 3

**MODULE 3**  
**DETERMINING**  
**UNKNOWN**  
**VALUES**

## Squares & Cubes - 1/24

square	cube
geometric shape	geometric shape
sides are equal	sides are equal
2 dimensional - 2D	3 dimensional - 3D
flat has area	has volume
area = side x side = $s^2$	surface area or volume = side x side x side = $s^3$



63

X	X squared = $x^2$	X cubed = $x^3$
1	1	1
2	4	8
3	9	27
4	16	64
5	25	125
6	36	216
7	49	343
8	64	512
9	81	729
10	100	1000
11	121	1331
12	144	1728
15	225	3375
20	400	8000

Perfect Squares      perfect Cubes

64

### 3.2.1 Simple Equations 1/31

Each "operation" has an inverse or opposite:

the inverse of + is -

the inverse of - is +

the inverse of  $\times$  is  $\div$  *fractions*

the inverse of  $\div$  is  $\times$

$x + 2 = 4$   
 $-2 \quad -2$   
 $x = 2$   
 $(2) + 2 = 4$

Foldable  
From  
front cart.  
Use  
your own  
Glue

Solving One-step Equations	
Equations with addition $x + 2 = 4$	Equations with subtraction $y - 7 = 10$
Equations with multiplication $6x = 24$	Equations with division $y/3 = 4$

$(12) - 7 = 10$   
 $y - 7 = 10$   
 $+7 \quad +7$   
 $y = 17$

65

$\frac{6x}{6} = \frac{24}{6}$ $x = 4$ $\checkmark 6(4) = 24$	$\frac{y}{3} = 4$ $(3) = (3)$ $y = 12$

66

Module 4 – Topics 1,2,3

I can classify numbers in the **real** number system.

I can **order** rational numbers.

I can use **positive** and **negative** numbers to describe **opposite** quantities.

I can identify and represent numbers on a **number line**.

I can use **inequality** statements.

I can explain the **meaning** of, interpret, and **compare** absolute values.

2/4- **Module intro**

2/5- **Module overview**

2/6-2/8

2/11 **MATH MENU**

67

# MODULE 4

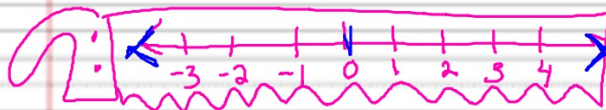
## Topic 1 Negative Numbers

## Topic 2 Absolute Value

## Topic 3 The Number System

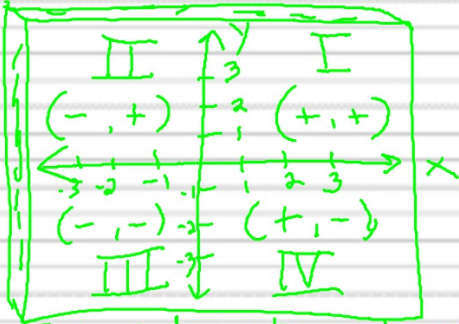
68





Number Line

**(-6,4)**



Coordinate plane

69

**Absolute Value**  
 $|x| =$  greater than positive  
 distance from zero  
 $|1-3| = 3$      $|6-3| = |3| = 3$

$x > 1$   $x$  greater than 1

$x < 4$   $x$  less than 4

Inequalities



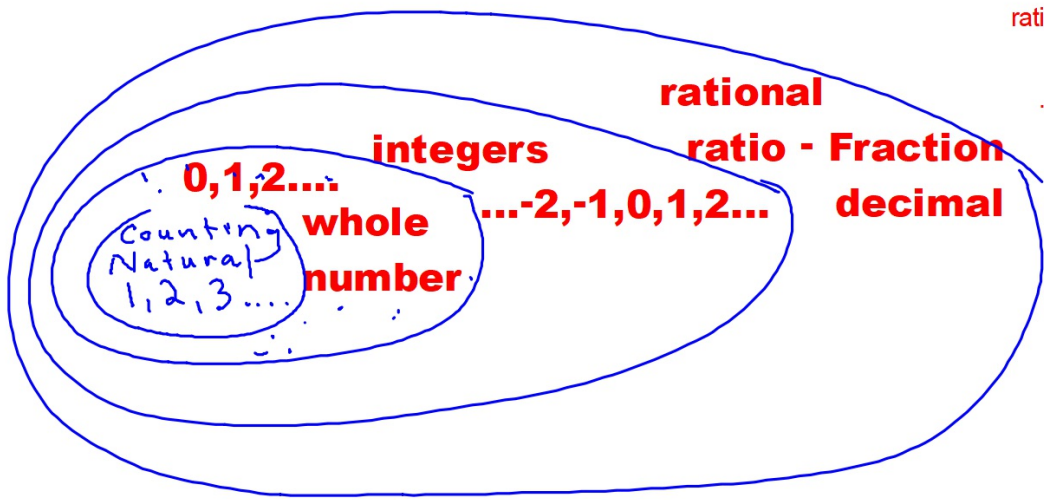
ellipsis ...

70

**-3**  
 same distance from 0

$$|-2| = 2$$

**Foldable**  
**from Mrs. D**



rational num  
all fracti  
integer  
...-3,-2,-1

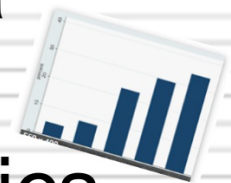
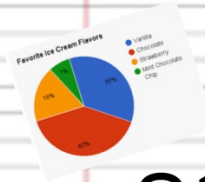
**page 70 bottom**

2/25 - Vocab Foldable p. 74  
- Vocab review p. 72  
2/26 - Measures of Center p. 75  
2/27 - 5 Data Summary  
2/28 & 2/29 - Graph Project  
(final assessment for  
Module 5)

71

# Module 5

## Data & Statistics



72





