Agenda

Homework:

- Go Math pg. 12 - Guided Practice (GP)
- Missing work

Materials:

- Notebook
- Go Math Book

Do Now:

1. **Take out:**
   - Go Math pg 4
   - *Square & Cube Root Chart*
2. Set up Cornell Notes (see TV)
3. When told to do so, grab your Go Math workbook from the back and TEAR OUT pg. 12
4. Write your NAME on pg 12
5. Discuss homework with a homework partner

Set up Cornell Notes

- **Topic:** Module 1.1 – Rational & Irrational Numbers
- **EQ:** How do you rewrite rational numbers and decimals, take square roots and cube roots, and approximate irrational numbers?

Date	Topic	Page
8/24 OR 8/25	Module 1.1 – Rational & Irrational Numbers	13 (or 15)

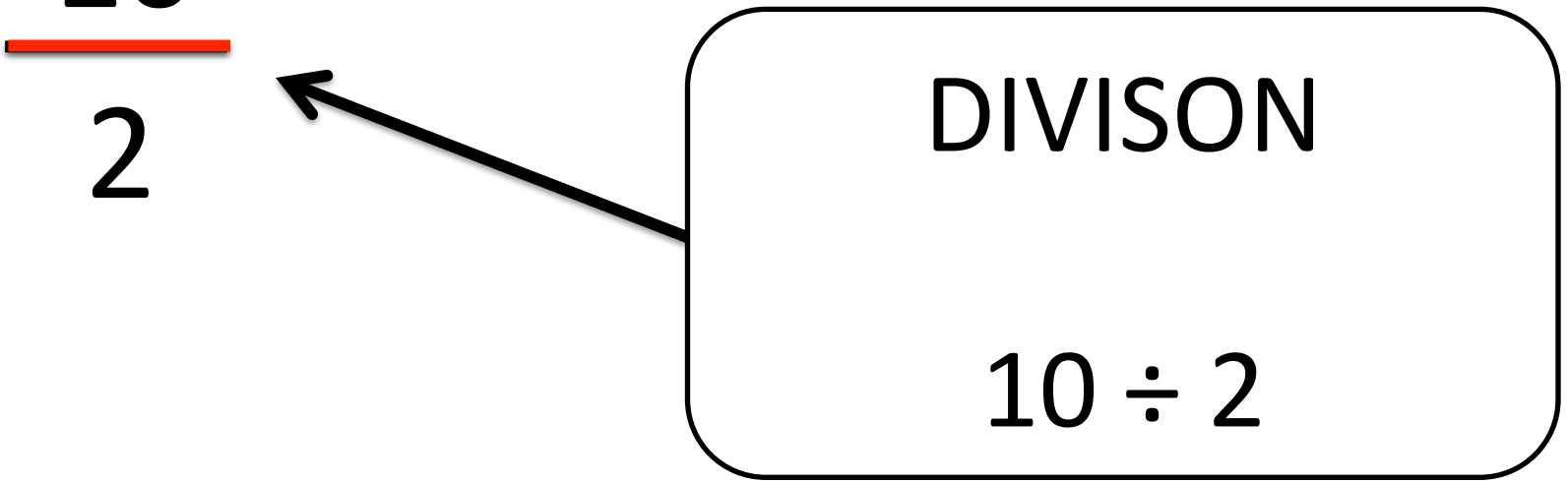
Going over the homework

Agenda

- Tape Square & Cube roots chart on the left page, next to today's notes
- Notes on:
  - Converting fractions to and from decimals
  - Square & Cube Roots
  - Approximating square roots
- Stations (15 minutes)
  - Group 1 (SmartBoard): Vocabulary
  - Group 2 (Whiteboards): Converting fractions & decimals
  - Group 3 (Near computers): Approximating Square Roots
- Exit Pass

What does the fraction bar mean?

$$\frac{10}{2}$$



How do you convert fractions to decimals?

- Numerator ÷ Denominator

$3\frac{5}{8}$ ÷ = 0.625

3.625

If there is a whole number,

Place it to the left of the decimal point.

How do you convert from decimals to fractions?

- Use your place values

PLACE VALUE AND DECIMALS									
ten thousands	thousands	hundreds	tens	ones	and	tenths	hundredths	thousandths	ten-thousandths
				3	.	2	5		
		1	4	5	.	1	0	6	8
			2	4	.	0	7	9	

Reduce!

$$3\frac{25}{100} = 3\frac{1}{4}$$

How do you convert repeating decimals to fractions?

- Example: $0.\overline{57}$

Let $x = 0.\overline{57}$ $\quad x = 0.\overline{57}$

Multiply both sides by 100 $\quad 100x = 57.\overline{57}$

Subtract both sides by 1x $\quad -1x \quad -0.\overline{57}$

Simplify $\quad 99x = 57$

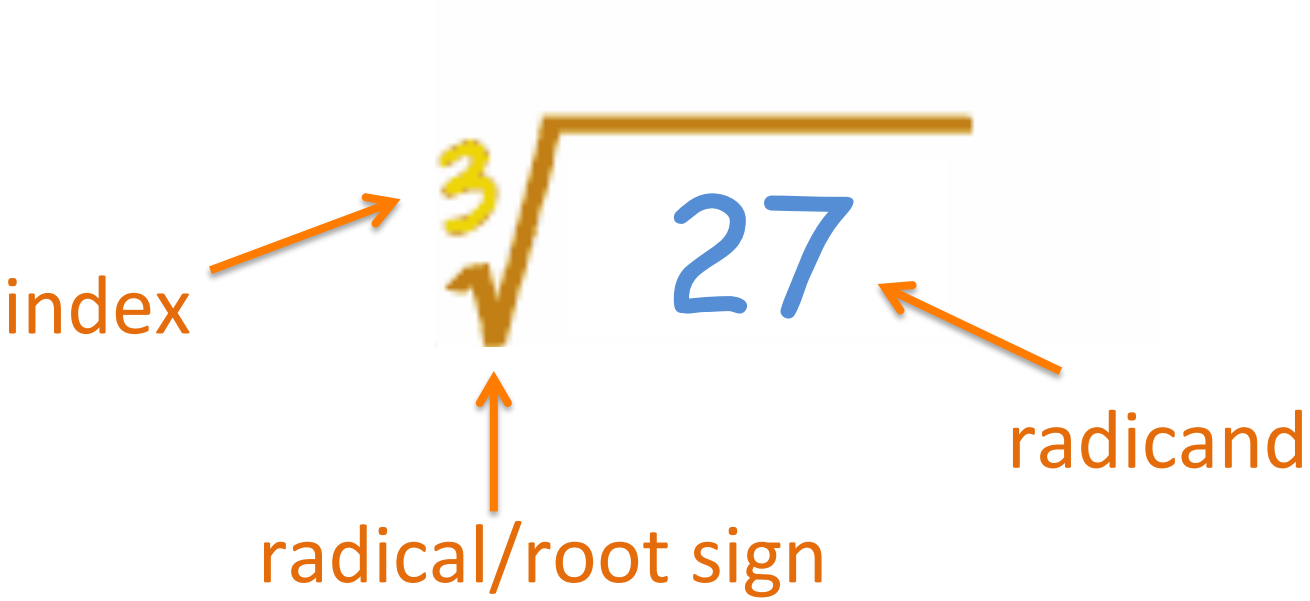
Divide both sides by 99 $\quad \frac{99x}{99} = \frac{57}{99}$

$$x = \frac{57}{99}$$

What does a square and cube root sign look like?

Square Root	Cube Root
$\sqrt{}$	$\sqrt[3]{}$

What are the parts of a root symbol?



This is read as the "cube root of 27"
OR "27 radical 3"

How do you evaluate square and cube roots?

- Square roots
  - What number, times ITSELF 2 times, equals the radicand

Evaluate $\sqrt{9}$

$\boxed{3} \bullet \boxed{3} = 9$

$\sqrt{9} = 3$

- Cube roots
  - What number, times ITSELF 3 times, equals the radicand

Evaluate $\sqrt[3]{8}$

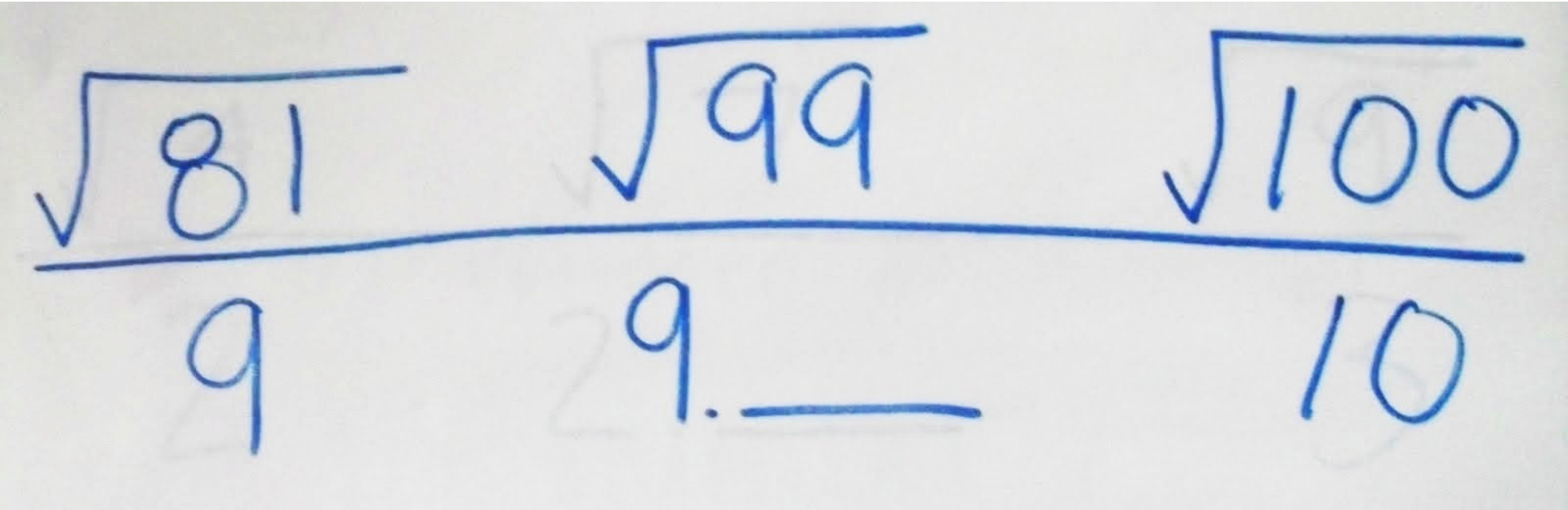
$\boxed{2} \bullet \boxed{2} \bullet \boxed{2} = 8$

$\sqrt[3]{8} = 2$

How do you approximate square roots?

- Use the perfect squares to help you estimate:

Example:



Vocabulary
(Pre-Algebra)

Module	Word	Definition	Go Math Page #

Vocabulary (Go Math pgs.7-10)

- Set up your vocabulary pages in the back of your notebook (see TV)
- Use your Go Math Workbook to find the definitions for the following words:
  - Rational Number,
  - Terminating Decimal
  - Repeating Decimal
  - Square Root
  - Principal Square Root
  - Perfect Square
  - Cube Root
  - Perfect Cube
  - Irrational Numbers