

Remote Learning Packet

NB: Please keep all work produced this week. Anything marked with PDF should be scanned and uploaded to your Google Classrooms account.

April 27th - May 1st, 2020

Course: Algebra I

Teacher(s): Mr. Mapes steven.mapes@greatheartsirving.org

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Weekly Plan:

Monday, April 27

Read pg. 507-509, look through pg. 509 Oral Ex. #1-17 Odd

Pg. 510 WE #2-16 Even (PDF)

Tuesday, April 28

Read pg. 512-515, look through pg. 515 Oral Ex. #2-16 Even

Pg. 515 WE #5, 6, 7, 11, 14, 17, 18, 20 All (PDF)

Wednesday, April 29

Read pg. 517-518, look through pg. 518-519 Oral Ex. #1-23 Odd

Pg. 519 WE #1-13 Odd, 21, 23 (PDF)

Thursday, April 30

Complete the Assessment for Today, pg. 520 Self Test 1 #1-13 Odd (PDF)

Read pg. 521-522, look through pg. 522 Oral Ex. #1-15

Friday, May 1

Pg. 522 WE #1-11 Odd, 15 (PDF)

Statement of Academic Honesty

I affirm that the work completed from the packet is mine and that I completed it independently.

I affirm that, to the best of my knowledge, my child completed this work independently

Student Signature

Parent Signature

I have attached some examples from each page assigned (see last page of pdf packet). As always, please email me with questions, and I will get back with you as soon as possible.

In addition, here are a set of links to Khan Academy below for each day that might be of use as well.

Day 1:

Comparing Rational Numbers <https://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-fractions-decimals/cc-7th-add-sub-rational-numbers/v/comparing-rational-numbers>

Finding midpoint between two fractions <https://www.youtube.com/watch?v=BGxzdSvYNBk>

Day 2:

Converting Fractions to decimals <https://www.khanacademy.org/math/arithmetic/arith-decimals/arith-review-decimals-to-fractions/v/converting-fractions-to-decimals-example>

Converting repeating decimals to fractions <https://www.khanacademy.org/math/cc-eighth-grade-math/cc-8th-numbers-operations/cc-8th-repeating-decimals/v/covering-repeating-decimals-to-fractions-1>

Day 3:

Intro to Square Roots <https://www.khanacademy.org/math/algebra/x2f8bb11595b61c86:rational-exponents-radicals/x2f8bb11595b61c86:radicals/v/introduction-to-square-roots>

Simplifying Square Roots of Fractions <https://www.khanacademy.org/math/algebra-basics/basic-alg-foundations/alg-basics-roots/v/rewriting-square-root-of-fraction>

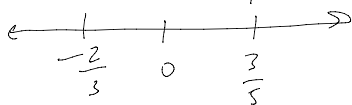
Day 4/5:

Simplifying Square Roots/Irrational Square Roots

<https://www.khanacademy.org/math/algebra/x2f8bb11595b61c86:rational-exponents-radicals/x2f8bb11595b61c86:simplifying-square-roots/v/simplifying-square-roots-1>

Day 1

pg. 520 # 29
covers $\frac{19}{15}$



$$\frac{3}{5} - \left(-\frac{2}{3}\right)$$

$$\frac{9}{15} + \frac{10}{15} = \left(\frac{19}{15}\right) \left(\frac{1}{5}\right)$$

$$= \frac{19}{75}$$

broken into 5 parts,

that is $\frac{19}{75}$ per part

so an additional $\frac{19}{75}$

from $-\frac{2}{3}$ (or $-\frac{50}{75}$) is:

$$-\frac{50}{75} + \frac{19}{75} = \left(-\frac{31}{75}\right)$$

$$-\frac{31}{75}$$

Day 2 Ex. pg. 515 # 24

Let $x = 2.3\bar{9}$

$$100x = 239.9\bar{9}$$

$$-x = -2.3\bar{9}$$

→ subtract $x / 2.3\bar{9}$ from both sides

$$\frac{99x = 237.6}{99 \quad 99}$$

$$x = \frac{237.6}{99} \left(\frac{10}{10}\right) \rightarrow \text{get rid of decimals in the fraction}$$

$$x = \frac{\begin{array}{r} 264 \\ 2376 \\ \hline 990 \end{array}}{990}$$

$$x = \frac{\begin{array}{r} 110 \\ 132 \\ 264 \\ \hline 990 \end{array}}{990}$$

$$x = \frac{\begin{array}{r} 12 \\ 132 \\ \hline 990 \end{array}}{990}$$

$$x = \frac{12}{825} \text{ or } 2 \frac{2}{5}$$

26. Let $x = -1.\overline{36}$

$$100X = -136.\overline{36}$$

$-X = +1.36 \rightarrow$ subtracting a negative
the same as adding a
positive...

$$\begin{array}{r} 99X = -135 \\ \hline 99 \quad 99 \end{array}$$

$$X = \frac{15}{\cancel{99} \atop 11}$$

$$X = -\frac{15}{11} \text{ or } -1\frac{4}{11}$$

Day 3

$$\begin{aligned} \text{ps. 529 \# 18} \quad -\sqrt{\frac{324}{729}} &= -\sqrt{\frac{324 \div 3}{729 \div 3}} \\ &= -\sqrt{\frac{108 \div 9}{243 \div 9}} \\ &= -\sqrt{\frac{12 \div 3}{27 \div 3}} \\ &= -\sqrt{\frac{4}{9}} \\ &= -\frac{2}{3} \end{aligned}$$

$$\begin{aligned} 12. \quad -\sqrt{\frac{225}{49}} &= -\sqrt{\frac{15 \cdot 15}{7 \cdot 7}} \\ &= -\frac{15}{7} \end{aligned}$$

$$\begin{aligned} 24. \quad \sqrt{\frac{20}{45}} &= \sqrt{\frac{20 \div 5}{45 \div 5}} \\ &= \sqrt{\frac{4}{9}} \\ &= \frac{2}{3} \end{aligned}$$

$$\begin{aligned} 26. \quad \sqrt{\frac{5}{180}} &= \sqrt{\frac{5 \div 5}{180 \div 5}} \\ &= \sqrt{\frac{1}{36}} \\ &= \frac{1}{6} \end{aligned}$$

Day 5

pg 522 #7

$$\sqrt{256} = \sqrt{16 \cdot 16}$$

$$= \sqrt{4 \cdot 4 \cdot 4 \cdot 4}$$

$$= \sqrt{(2 \cdot 2 \cdot 2 \cdot 2)(2 \cdot 2 \cdot 2 \cdot 2)}$$

$$= 2 \cdot 2 \cdot 2 \cdot 2$$

$$= 16$$

↓ Prime factorization?

$$\# 18. \sqrt{864} = \sqrt{2 \cdot 432}$$

$$= \sqrt{2 \cdot 2 \cdot 216}$$

$$= 2\sqrt{216}$$

$$= 2\sqrt{3 \cdot 72}$$

$$= 2\sqrt{3 \cdot 3 \cdot 24}$$

$$= 2 \cdot 3\sqrt{24}$$

$$= 2 \cdot 3\sqrt{4 \cdot 6}$$

$$= 2 \cdot 3 \cdot 2 \cdot \sqrt{6}$$

$$= 12\sqrt{6}$$