

**1. Welcome! Please get your ISN from your shelf and have a seat!**

**2. Label pages 29-30 DO NOW 8/28-9/1**

**3. Split page 29 into 2 sections (a top half and a bottom half)**

**4. On the top half of page 29 copy and answer the following..**

**Reduce the rational.**

1.  $\frac{12}{15}$

2.  $\frac{30}{39}$

**Perform the indicated operations. Reduce to lowest terms.**

3.  $\frac{3}{4} + \frac{3}{8}$

4.  $\frac{6}{19} - \frac{7}{24}$

5.  $\frac{1}{6} * \frac{1}{3}$

Sep 8-10:02 AM

1. Please grab you ISN and have a seat.

2. On the bottom half of page 29 in your ISN copy and answer the following DO NOW.

Convert to a mixed number to an improper fraction.

1.  $2\frac{5}{7}$   $\left(\frac{19}{7}\right)$   
14 + 5

2.  $-8\frac{3}{5}$   $\left(\frac{-43}{5}\right)$   
 $-8 \times 5 = 40 + 3 = -43$

Perform the indicated operation, Reduce if possible.

3.  $\frac{1}{4} \div \frac{7}{24}$

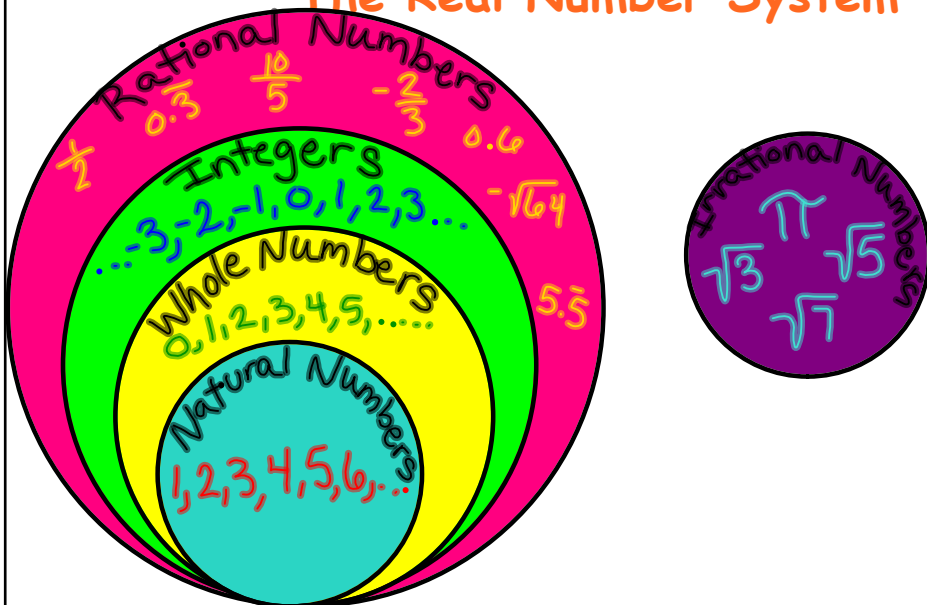
4.  $\left(\frac{1}{5} - \frac{1}{6}\right) \div \frac{7}{9}$

$\frac{1}{4} \times \frac{24}{7} = \frac{24}{28} = \left(\frac{6}{7}\right)$   
 $\left(\frac{1}{5} - \frac{1}{6}\right) \rightarrow \left(\frac{6}{30} - \frac{5}{30}\right) = \frac{1}{30}$   
 $\frac{1}{30} \cdot \frac{9}{7} = \frac{9}{210} = \frac{3}{70}$

Aug 29-9:15 AM

# TOC page 31 Real # Subsets & Properties

## The Real Number System



Sep 8-10:02 AM

Please grab your ISN and have a seat!  
 Copy and answer the following DO NOW on page 30 on the top half.

Use the order of operations to find the value of the expression.

1.  $4(-5)^2 - 5(-3)^2$       2.  $(4-1)^3 - (4-2)^3$

$4(25) - 5(9)$        $27 - 8 = 19$

$100 - 45 = 55$        $\frac{19}{19}$

Simplify the square root.

3.  $\sqrt{252}$       4.  $2\sqrt{300}$

$6\sqrt{7}$        $20\sqrt{3}$

Perform the indicated operation. Simplify if possible.

5.  $\sqrt{27} - \sqrt{12}$       6.  $\sqrt{2} + \sqrt{8}$

$\sqrt{3}$        $3\sqrt{2}$

Aug 31-8:03 AM

## PROPERTIES OF REAL NUMBERS

LET a, b, AND c REPRESENT REAL NUMBERS

Property	Addition	Multiplication
Closure	The sum of any 2 real #'s is a real #. $a+b=c$ $4\sqrt{2}+5\sqrt{2}=9\sqrt{2}$	The product of any 2 real #'s is a real #. $10(\frac{1}{2})=5$ #s
Commutative	Two real #'s can be added in any order. $a+b=b+a$ $13+7=7+13$	Two real #'s can be multiplied in any order: $ab=ba$ $13 \cdot 7 = 7 \cdot 13$
Associative	If 3 real #'s are added, it makes no difference which 2 are added first. $(a+b)+c = a+(b+c)$	If 3 real #'s are multiplied, it makes no difference which 2 are multiplied first. $(a \cdot b) \cdot c = a \cdot (b \cdot c)$
Distributive		Multiplication distributes over addition. $a \cdot (b+c) = ab+ac$

Sep 8-10:20 AM

### Page 32 Real # Subsets & Properties Examples

Example 1: Consider the following set of numbers and list the numbers in the set that are

{ -9, -1.3, 0, 0.3,  $\pi/2$ ,  $\sqrt{9}$ ,  $\sqrt{10}$ }

a) natural numbers:  $\sqrt{9}$

b) whole numbers: 0,  $\sqrt{9}$

c) integers: -9, 0,  $\sqrt{9}$

d) rational numbers: -9, -1.3, 0, 0.3,  $\sqrt{9}$

e) irrational numbers:  $\pi/2$ ,  $\sqrt{10}$

f) real numbers: -9, -1.3, 0, 0.3,  $\pi/2$ ,  $\sqrt{9}$ ,  $\sqrt{10}$

Sep 9-9:52 AM

## Page 32 Example 2: Name the property illustrated

a)  $(4 * 7) * 3 = 4 * (7 * 3)$

Associative Property of Multiplication

b)  $3(\sqrt{5} + 4) = 3(4 + \sqrt{5})$

Commutative Property of Addition

c)  $3(\sqrt{5} + 4) = 3\sqrt{5} + 12$

Distributive Property of Multiplication

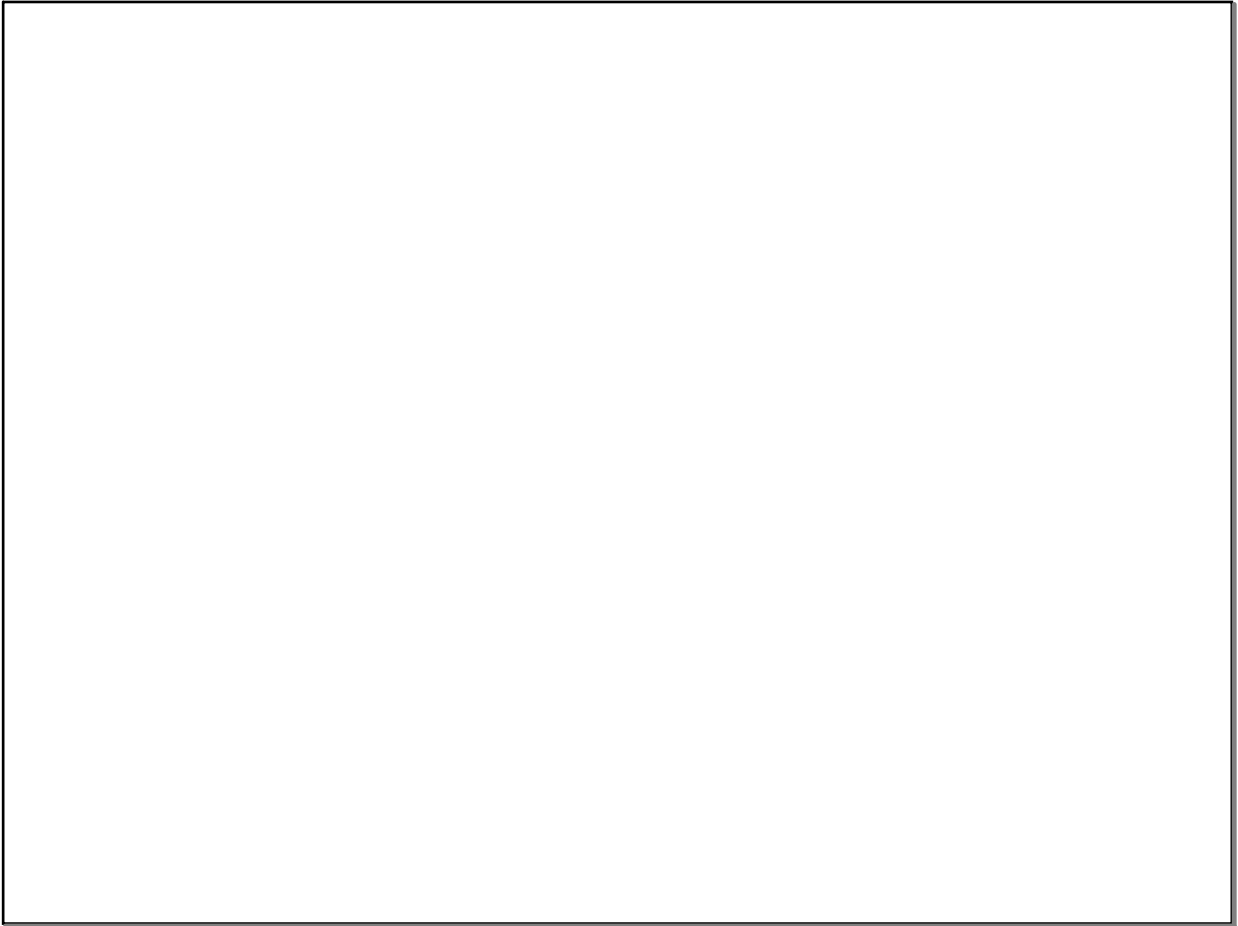
d)  $2(\sqrt{3} + \sqrt{7}) = (\sqrt{3} + \sqrt{7})2$

Commutative Property of Multiplication

Sep 9-9:57 AM

P. 242  
pdf 268  
1-4, 16-38 even  
all

Sep 9-10:35 AM



Aug 29-8:13 AM