

Have your ws out and start correcting.

You will need textbook pages 321-328 and your notebook.

$(3.2 \times 10^8)(1.3 \times 10^9)$	$\frac{8.8 \times 10^7}{4.4 \times 10^4}$	$(2.5 \times 10^4)(4.1 \times 10^4)$	$\frac{6.4 \times 10^{10}}{3.2 \times 10^2}$
$\frac{4.16 \times 10^{17}}{(1.5 \times 10^6)(5.9 \times 10^4)}$	$\frac{2.0 \times 10^3}{1.44 \times 10^{10}}$ $\frac{2.4 \times 10^2}{6 \times (10^{-1} \times 10^8)}$	$1.025 \times 10^9$	$\frac{2.0 \times 10^8}{9.8 \times 10^7}$ $\frac{1.4 \times 10^{-5}}{7 \times 10^{12}}$
$\frac{8.85 \times 10^{10}}{(3.2 \times 10^3)(6.4 \times 10^9)}$	$\frac{9.6 \times 10^5}{5 \times 10^4}$	$(8.5 \times 10^2)(3.4 \times 10^{-5})$	$7.0 \times 10^{12}$
$2.048 \times 10^{13}$	$1.92 \times 10$	$2.89 \times 10^{-2}$	

← C (← 5)  
7 +

Oct 15-2:27 PM

Review today for Summative quiz over Unit 5 Module 9 and 10 on Thursday.

Write each fraction as a dec

**A**  $\frac{1}{4}$

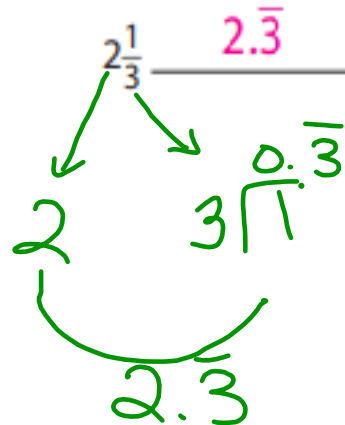
$$\begin{array}{r} 0.25 \\ 4 \overline{)1.00} \\ \underline{-8} \phantom{0} \\ 20 \\ \underline{-20} \\ 0 \end{array}$$

$\frac{1}{4} = 0.25$

**B**  $\frac{1}{3}$

$$\begin{array}{r} 0.333 \\ 3 \overline{)1.000} \\ \underline{-9} \phantom{00} \\ 10 \\ \underline{-9} \phantom{0} \\ 10 \\ \underline{-9} \\ 1 \end{array}$$

$\frac{1}{3} = 0.\overline{3}$



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Repeating decimals pg 323

The average score on a biology test was  $72.\overline{1}$ . Write the average score using a fraction.

$$\begin{aligned}
 & \boxed{x = 72.\overline{1}} \\
 & (10)x = 72.\overline{1} (10) \\
 & 10x = 721.\overline{1} \\
 & \begin{array}{r} 10x = 721.\overline{1} \\ -x = 72.\overline{1} \\ \hline 9x = 649 \end{array} \\
 & \boxed{x = \frac{649}{9}}
 \end{aligned}$$

$0.\overline{26}$

$$\begin{aligned}
 & \boxed{x = 0.\overline{26}} \\
 & (100)x = 0.\overline{26} (100) \\
 & 100x = 26.\overline{26} \\
 & \begin{array}{r} 100x = 26.\overline{26} \\ -x = 0.\overline{26} \\ \hline 99x = 26 \end{array} \\
 & \boxed{x = \frac{26}{99}}
 \end{aligned}$$

$0.\overline{325}$

$$\begin{aligned}
 & \boxed{x = 0.\overline{325}} \\
 & (1000)x = 0.\overline{325} (1000) \\
 & 1000x = 325.\overline{325} \\
 & \begin{array}{r} 1000x = 325.\overline{325} \\ -x = 0.\overline{325} \\ \hline 999x = 325 \end{array} \\
 & \boxed{x = \frac{325}{999}}
 \end{aligned}$$

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**EXAMPLE 2** pg. 323

Solve each equation for x.

**A**  $\sqrt{x^2} = \sqrt{289}$

$x = \pm 17$

$17 \cdot 17 = 289$   
 $-17 \cdot -17 = 289$

Inverse operations

$+$   $-$   $\times$   $\div$   
 $x^2$   $\sqrt{\quad}$   $x^3$   $\sqrt[3]{\quad}$

**B**  $\sqrt[3]{x^3} = \sqrt[3]{1,000}$

$x = 10$


only +  
 $(-)(-)(-) = (-)$

Oct 15-3:03 PM

pg. 329 The set of real numbers consists of the set of rational numbers and the set of irrational numbers.

n/o  
o/n

**Rational**



-Can be written in the form

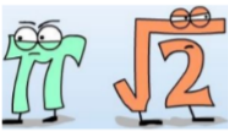
**a**

**b**  $b \neq 0$

-Terminating decimals  
0.35  $\frac{35}{100}$

-Repeating decimals  
0.333333...  $\frac{1}{3}$

**Irrational**



-Cannot be written in the form

~~**a**~~

~~**b**~~

-Non-Terminating decimals  
3.14159...


-Non-Repeating decimals  
0.387130923...

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Determine whether the following numbers are rational or irrational.

	Rational	Irrational
$\sqrt{9} = 3$	✓ <span style="color: blue;"><math>\frac{3}{1}</math></span>	
$\sqrt{8}$		✓
$\pi$		✓
$\frac{22}{7}$	✓	
9.48	✓	
$\frac{33}{2}$	✓	
2.23606...		✓
-25	✓ <span style="color: blue;"><math>-\frac{25}{1}</math></span>	

**Rational**



-Can be written in the form


**a**

**b**  $b \neq 0$

-Terminating decimals  
0.35

-Repeating decimals  
0.333333...

**Irrational**



-Cannot be written in the form

~~**a**~~

~~**b**~~

-Non-Terminating decimals  
3.14159...

-Non-Repeating decimals  
0.387130923...

Sep 9-9:48 AM

**Real Numbers:**  
All numbers you've ever experienced, so far...

**Rational Numbers:**  
Examples:  $\frac{1}{2}$ , 3, -14, 7.184,  $2\frac{1}{4}$ ,  $5.\overline{333}$

**Integers:**  
 $\{ \dots, -3, -2, -1, 0, 1, 2, 3, \dots \}$

**Whole Numbers:**  
 $\{ 0, 1, 2, 3, \dots \}$

**Irrational Numbers:**  
 $\pi$ ,  $\sqrt{2}$ , and all other non-terminating, non-repeating decimals...

*Handwritten notes:*  
 $\frac{1}{2}$   
 $7.184$   
 $\frac{184}{100}$   
 $\frac{7184}{1000}$   
 $5\frac{1}{3}$   $5\frac{2}{6}$

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Write all names that apply to each number.

A. -5  
*Integer, Rat, Real*

B. -12.75  
*Rat, Real*

C.  $\frac{16}{2} = 8$   
*whole, Int, Rat, Real*

D. 0.3030030003...

**Real Numbers:**  
All numbers you've ever experienced, so far...

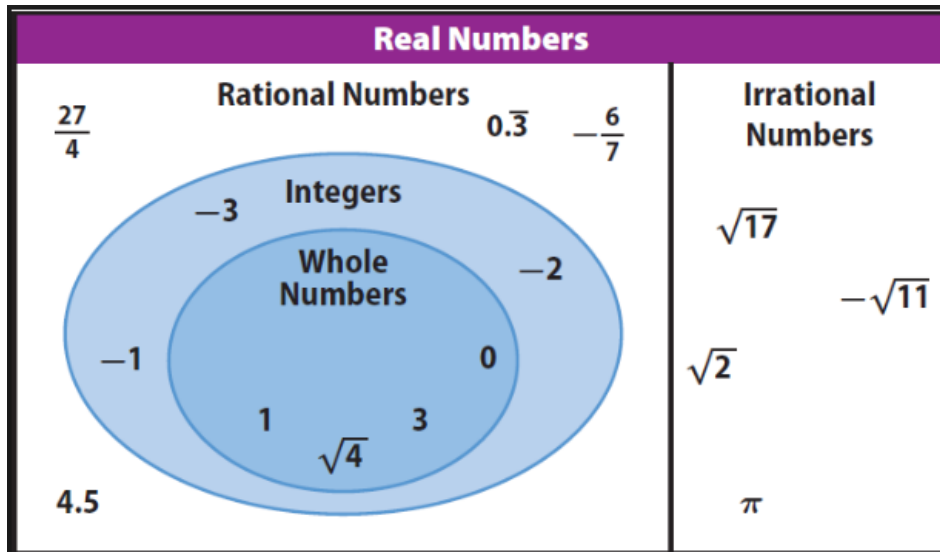
**Rational Numbers:**  
Examples:  $\frac{1}{2}$ , 3, -14, 7.184,  $2\frac{1}{4}$ ,  $5.\overline{333}$

**Integers:**  
 $\{ \dots, -3, -2, -1, 0, 1, 2, 3, \dots \}$

**Whole Numbers:**  
 $\{ 0, 1, 2, 3, \dots \}$

**Irrational Numbers:**  
 $\pi$ ,  $\sqrt{2}$ , and all other non-terminating, non-repeating decimals...

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Oct 15-2:36 PM

pg. 325

Write each number in scientific notation. (Lessons 10.2, 10.3)

1. 25,500,000 \_\_\_\_\_      2. 0.00734 \_\_\_\_\_

Write each number in standard notation. (Lessons 10.2, 10.3)

3.  $5.23 \times 10^4$  \_\_\_\_\_      4.  $1.33 \times 10^{-5}$  \_\_\_\_\_

Simplify each expression. (Lessons 10.1, 10.4)

5.  $(9 - 7)^3 \cdot 5^0 + (8 + 3)^2$       6.  $\frac{(4 + 2)^2}{[(9 - 3)^3]^2}$

7.  $3.2 \times 10^5 + 1.25 \times 10^4 + 2.9 \times 10^5$       8.  $(2,600)(3.24 \times 10^4)$

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Complete in preparation for the quiz on Thursday. All problems will come directly from those listed below:

pg. 321 (1 - 18)

pg. 322 (1 - 3, 5, 7, 8)

pg. 324 (7 - 16)

pg. 325 (1 - 8)

pgs. 327 - 328 (2 - 4, 8, 10, 11 - 14, 16 - 18)

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