

Algebra I Class Schedule for Thursday, November 6, 2008

Materials:

1. Pencils (in the case on my desk)
2. Calculators (in the case on my desk)
3. Handouts (attached)
4. Notebooks and Binders (in class)

NAME:

Do Now:

- I. From Mixed Number to Improper Fraction to Mixed Number  
Fill in the blanks!

Operation	First Step	Improper Fraction Math Key!	Mixed Number
$1\frac{2}{3} + 3\frac{1}{4}$			
$5\frac{2}{9} - 3\frac{1}{3}$			
$(2\frac{7}{8})(4\frac{1}{16})$			
$(4\frac{2}{3}) \div (2\frac{1}{3})$			

Ex:

$$1 \quad \left[ \begin{array}{c} \curvearrowright \\ 1\frac{2}{3} \\ \curvearrowleft \\ x \end{array} \right] = \frac{5}{3}$$

$$50 \overline{) 1653} \begin{array}{r} 33 \text{ R} 3 \\ -1650 \\ \hline 3 \end{array} \quad \text{or} \quad 33\frac{3}{50}$$

**EXAMPLE 6** Analyze a conditional statement

Identify the hypothesis and the conclusion of the statement “If a number is a rational number, then the number is an integer.” Tell whether the statement is *true* or *false*. If it is false, give a counterexample.

**Solution**

**Hypothesis:** a number is a rational number

**Conclusion:** the number is an integer

The statement is false. The number 0.5 is a counterexample, because 0.5 is a rational number but not an integer.

**GUIDED PRACTICE** for Examples 4, 5, and 6

For the given value of  $a$ , find  $-a$  and  $|a|$ .

8.  $a = 5.3$

9.  $a = -7$

10.  $a = -\frac{4}{9}$

Identify the hypothesis and the conclusion of the statement. Tell whether the statement is *true* or *false*. If it is false, give a counterexample.

- If a number is a rational number, then the number is positive.
- If the absolute value of a number is positive, then the number is positive.

**2.1 EXERCISES****HOMEWORK KEY**

○ = WORKED-OUT SOLUTIONS  
on p. WS3 for Exs. 7, 29, and 53

★ = STANDARDIZED TEST PRACTICE  
Exs. 3, 4, 39, 50, 56, and 59

**SKILL PRACTICE**

- VOCABULARY** Copy and complete: A number is a(n) ? if it can be written in the form  $\frac{a}{b}$  where  $a$  and  $b$  are integers and  $b \neq 0$ .
- VOCABULARY** What is the opposite of  $-2$ ?
- ★ **WRITING** Describe the difference between whole numbers and positive integers.
- ★ **WRITING** For a negative number  $x$ , is the absolute value of  $x$  a *positive number* or a *negative number*? Explain.

**EXAMPLE 1**  
on p. 64  
for Exs. 5–13



**GRAPHING AND COMPARING INTEGERS** Graph the numbers on a number line. Then tell which number is greater.

- |                   |                 |                    |
|-------------------|-----------------|--------------------|
| 5. 0 and 7        | 6. 0 and $-4$   | 7. $-5$ and $-6$   |
| 8. $-2$ and $-3$  | 9. 5 and $-2$   | 10. $-12$ and 8    |
| 11. $-1$ and $-5$ | 12. 3 and $-13$ | 13. $-20$ and $-2$ |

Next: Do the following problems, using your text book. Following the instructions, and place your answers here

Page 67: 6, 8, 10, 13

Number Lines ↙

5. \_\_\_\_\_  $\longleftrightarrow$

6. \_\_\_\_\_  $\longleftrightarrow$

8 \_\_\_\_\_  $\longleftrightarrow$

10. \_\_\_\_\_  $\longleftrightarrow$

13. \_\_\_\_\_  $\longleftrightarrow$

What are the opposites of the following numbers or terms:

13.)  $-13$  \_\_\_\_\_

14.)  $a$  \_\_\_\_\_

15.)  $b + a$  \_\_\_\_\_

16.)  $2\frac{1}{2}$  \_\_\_\_\_

**What is the remainder for the following?**

13.)  $325 \div 60$  \_\_\_\_\_

14.)  $23 \div 4$  \_\_\_\_\_

15.)  $100 \div 12.5$  \_\_\_\_\_

16.)  $7 \div 3$  \_\_\_\_\_

**Challenges: Substitute the values shown into the expressions and solve them.**

**p. 82; 32 – 37**

$$x = 3.6$$

$$y = 6.6$$

$$z = -11$$

Example:

32.)  $(x - y) - |z|$

$$(3.6 - 6.6) - |-11|$$

$$(-3) - |-11|$$

$$(-3) - 11 = -14$$

$x = 3.6$

$y = 6.6$

$z = -11$

$33.) (x - |-y|) - z$

$34.) x - |y - z|$

$35.) (-x - y) - z - 5$

$36.) -z + y - x - (-2.4)$

Good work!