September 6, 2011

Lesson 1.2 **Warm Up**
For use before Lesson 1.2

Add.

1. $9 + 4$ 13

2. $-5 + (-1)$ -6

3. $-8 + 13$ 5

4. $12 + (-8)$ 4

5. $-10 + 6$ -4

6. $-14 + 14$

Get out your homework

Journal: pg 6–9
1–17 all

The temperature first rises 10 degrees and then falls 12 degrees. Is the end temperature greater than or less than the starting temperature? How does this compare to adding integers?

Review of last time:

Adding Integers with the Same Sign

Words Add the absolute values of the integers. Then use the common sign.

Numbers $2 + 5 = 7$ $-2 + (-5) = -7$

Adding Integers with Different Signs

Words Subtract the lesser absolute value from the greater absolute value. Then use the sign of the integer with the greater absolute value.

Numbers $8 + (-10) = -2$ $\quad -13 + 17 = 4$

Additive Inverse Property

Words The sum of an integer and its **additive inverse,** or opposite, is 0.

Numbers $6 + (-6) = 0$ $\quad -25 + 25 = 0$

On Your Own

Add.

4. $-2 + 11$

5. $13 + (-8)$

6. $9 + (-10)$

7. $-8 + 4$

8. $7 + (-7)$

9. $-31 + 31$

Discuss with your partner:

- "If the sum of two integers is negative, are both integers negative? How do you know?"
- "If the sum of two integers is positive, are both integers positive? How do you know?"

Discuss with your partner:

- What do you know about the sum $A + B$? Explain your reasoning.

positive answer
Since B is bigger

Discuss with your partner:

- Two integers have different signs. Their sum is −8. What are possible values for the two integers?

+

$-16 + 8$

$-12 + 4$

$-15 + 7$

$3 + (-11)$

$10 + (-18)$

infinite # of possibilities

$a = 4$
$b = -5$ $c = -8$

ALGEBRA Evaluate the expression when $a = 4$, $b = -5$, and $c = -8$.

40. $a + b$ 41. $b + c$ 42. $|a + b + c|$

$a+b$
$= 4+(-5)$
$= -1$

$b+c$
$= -5+(-8)$
$= -13$

$|a+b+c|$
$= |4+(-5)+(-8)|$
$= |-9|$
$= 9$

simplify everything inside first.

Homework:

Practice Journal page 10 #1-12 all due tomorrow

$-10+(-12)+15$

$=-10+3$

$=-7$