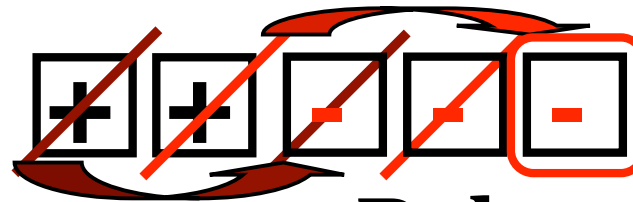


# Account Balance



Balance is **1**



Balance is **- 1**

G5 U 7

L 7.8

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# Ambiguous

more than 1 meaning

$$7 - 2 + 1$$

What does it mean?

G5 U 7

L 7.4

$$\overset{5}{7 - 2} + 1 = 6$$

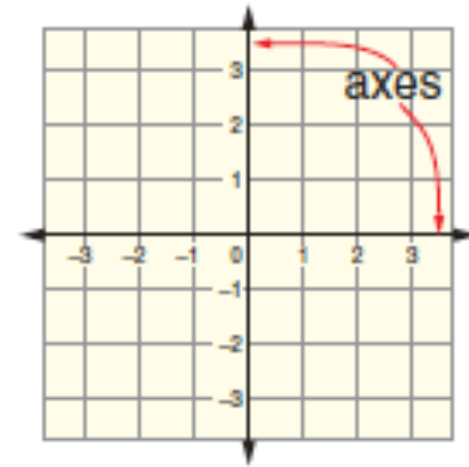
or

$$7 - \overset{3}{2 + 1} = 4$$

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# Axis plural Axes

2 intersecting number lines used to form a coordinate grid



G5 U 7

L 7.6

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**Base** the number raised to a power

**Exponent** how many times the base is used as a factor

$5^3 = 5 * 5 * 5 = 125$

G5 U 7

L 7.1

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# Change Sign Key



G5 U 7

L 7.11

positive to negative  
*or*  
negative to positive

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# Debt

G5 U 7

L 7.8

You owe more money than you have.

You are **in the red!**

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# Expanded Notation

G5 U 7

L 7.3

Show the sum of the values of the digits.

$$3,000 + 500 + 3 = 3,502$$

$$3 * 1000 + 5 * 100 + 3 = 3,502$$

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# Exponential Notation

G5 U 7

L 7.1

Show **repeated** multiplication by

the **same factor**.

$$5^4$$

$$5 * 5 * 5 * 5$$

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# Expression

G5 U 7

L 7.4

A group of mathematical symbols which **may include numbers, variables, operations symbols and grouping symbols**; but **never a relation symbol ( $> = <$ )**

$$3 (8 - 2)$$

$$3 n$$

$$4x + 5t$$

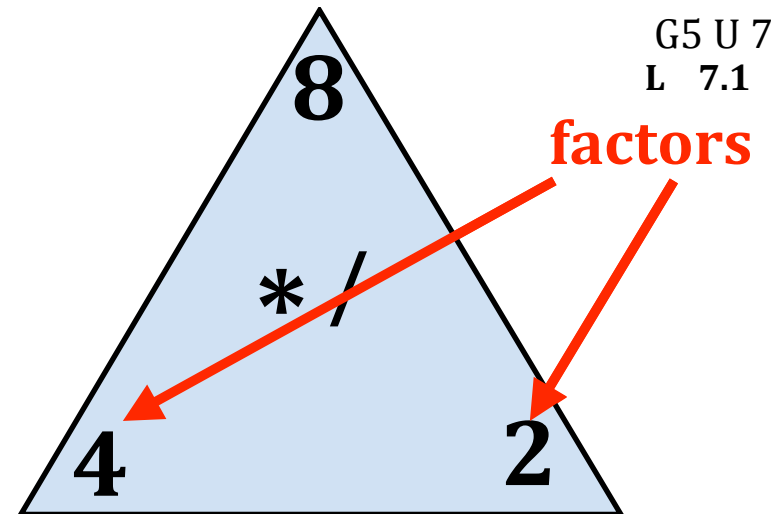
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# Factor

any number multiplied by another number to give a product

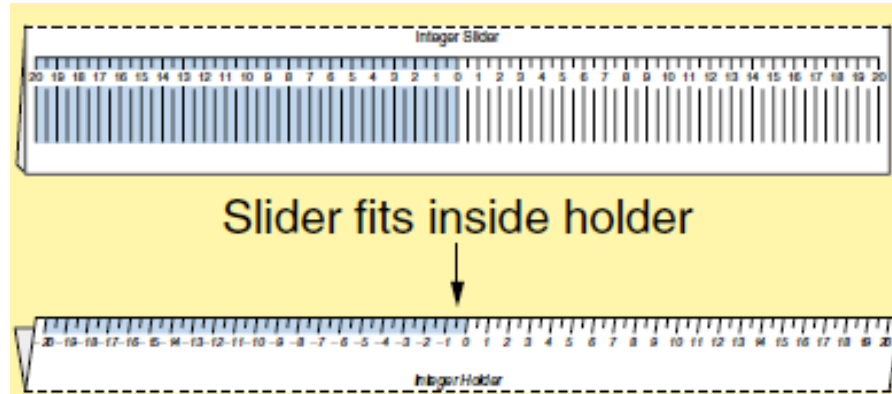
G5 U 7

L 7.1



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# Slide Rule



G5 U 7

L 7.10

a tool used to add and subtract fractions and integers

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# In the Black

more positive than negative

You have more money than you owe.

Why is the day after Thanksgiving called **BLACK FRIDAY**?

G5 U 7

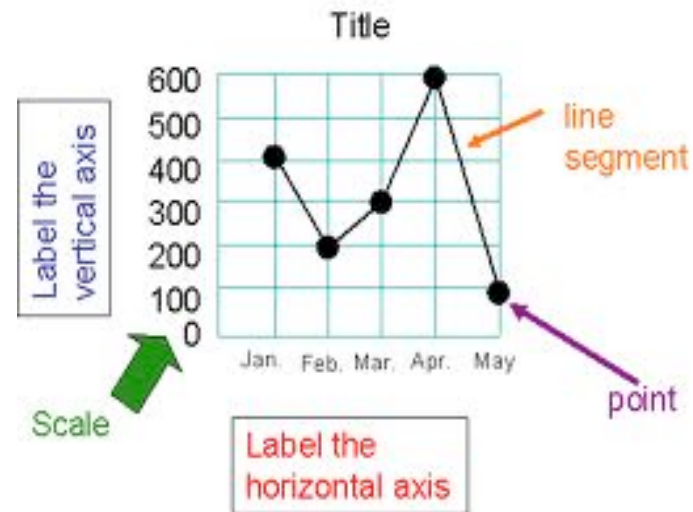
L 7.8

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**In** more negative than positive G5 U 7  
L 7.8  
**the** You owe more money than you have.  
**Red** **You are in debt!**

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**Line Graph**  
same as broken  
line graph



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# Negative Number

less than 0

G5 U 7

L 7.7; 1s1

to the left of 0  
on the horizontal number line



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# Nested Parentheses

G5 U 7

L 7.4

parentheses inside parentheses

Clear the inside set of  
parentheses first.

$$((24 \div 6) * 5) + 2 =$$

$$(4 * 5) + 2 =$$

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# Number-and-Word-Notation

G5 U 7

L 7.2

**36 billion** for **36,000, 000,000**

**24 and 7 thousandths** for **24.007**

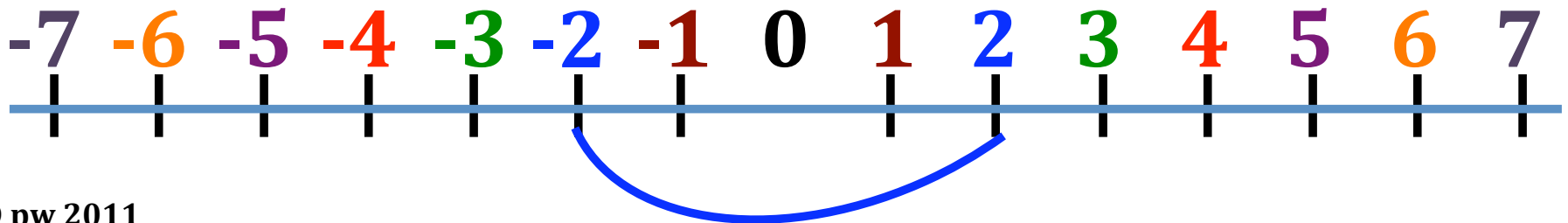
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# Opposite of a Number

G5 U 7

L 7.11

Same distance on other side of 0 on the number line



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# Order of Operations <sup>G5 U 7</sup> <sub>L 7.5</sub>

1. Clear parentheses from inside out.

2. Compute exponents.

3. Multiply or divide in order.

4. Add or subtract in order.

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1.  $2^2 * (2 * 3^2) \div 9 + (4 \div 2) + 3 * 6 =$

2.  $2^2 * (2 * 9) \div 9 + 2 + 3 * 6 =$

3.  $4 * 18 \div 9 + 2 + 3 * 6 =$

4.  $72 \div 9 + 2 + 3 * 6 =$

5.  $8 + 2 + 18 = 28$

An example of  
order of  
operations

G5 U 7  
L 7.5

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# Positive Powers of 10 G5 U 7 L 7.2

$$10^1 = \underline{10} \qquad 10^2 = \underline{100} \qquad 10^3 = \underline{1000}$$

$10 * 10$                        $10 * 10 * 10$

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# Power of a Number G5 U 7 L 7.1

5 to the  
third power.

$$5^3$$

Note the  
exponent.

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# Scientific Notation

G5 U 7

L 7.3

Product of a **whole number** and a **power of 10**

$$\underline{4}\underline{0},\underline{0}\underline{0}\underline{0} = 4 * 10^4$$

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# Standard Notation

G5 U 7

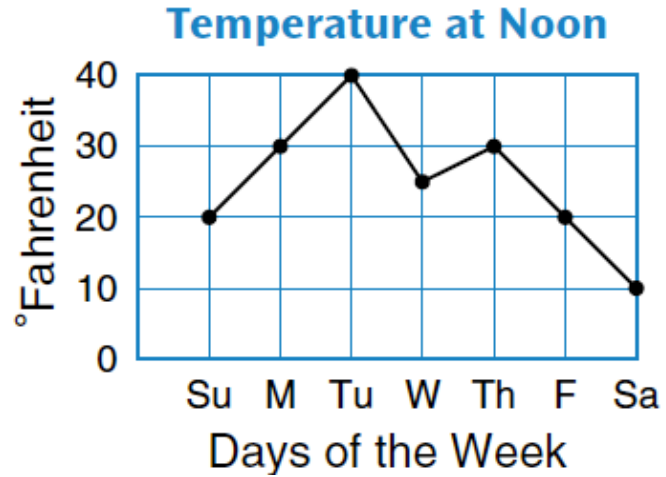
L 7.1

One digit in each place

**476**,000

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# Trend change over time

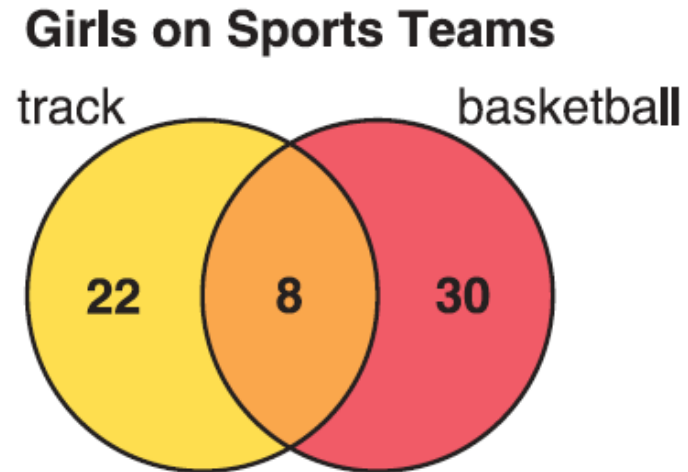


G5 U 7  
L 7.6

Over time,  
the  
temperature  
has dropped.

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# Venn Diagram



G5 U 7  
L 7.6

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