

Introducing Negative Numbers

Lesson 1-10

DATE

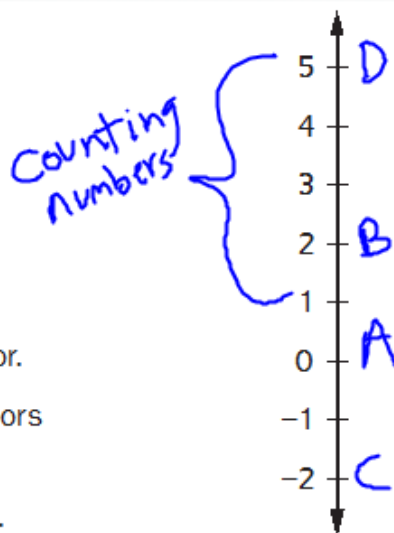
TIME

Math Message

- 1 Alyssa went to the doctor's office for her annual checkup. She made several stops. On the number line, plot a point for each floor she visited and label it with its letter.

The ground floor of the building is 0 on the number line.

- A: Alyssa entered the building at ground level.
B: She took the elevator to the doctor's office on the 2nd floor.
C: She went down to the lab, located in the basement two floors below ground level, for a blood test.
D: She took the elevator to the 5th floor to have X-rays taken.

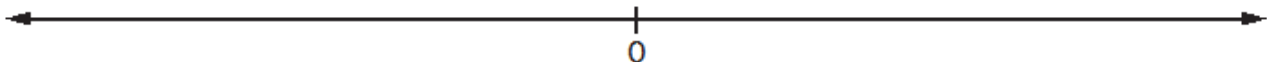


- 2 Mr. Pima's class planned a raffle. Three students sold raffle tickets. The goal for each student was to sell \$50 in tickets. The table below shows how well each of the three students did. Complete the table.

Student	Student Ticket Sales	Dollars Above or Below Goal
A	\$5.50 short of the goal	
B	Met the goal exactly	
C	Passed goal by \$1.75	

- 3 a. Describe a situation in which you can use both positive and negative numbers. Use examples to explain positive, negative, and 0 in your situation.

- b. On the number line below, plot and label some points for your situation.



Expanding the Number System

Lesson 1-10

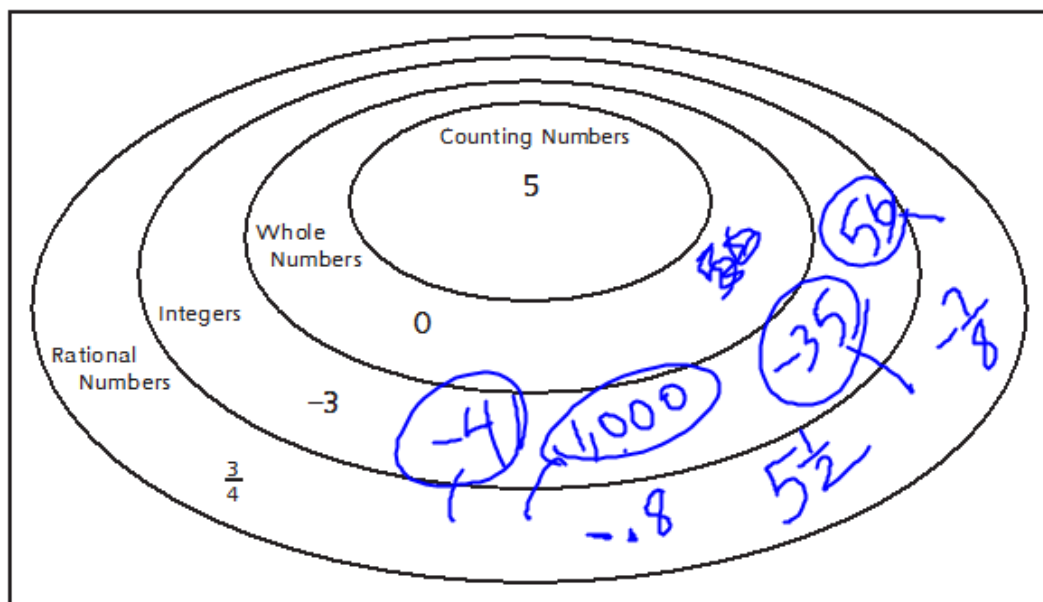
DATE _____

TIME _____

Read *Student Reference Book*, pages 89–90.

- 1 You may have seen Venn diagrams before. Study this one, which shows how some numbers fit into categories. If one circle is inside another, the numbers in the smaller circle must belong to both circles. Use the examples and the information in the *Student Reference Book* to help you place these numbers in the diagram: -35 ; 56 ; $5\frac{1}{2}$; -0.8 ; $-\frac{7}{8}$; $1,000$; -4 .

Number Systems



- 2 For each number, circle all that apply:

-25	Counting number	Whole number	Integer	Rational number
$1\frac{5}{8}$	Counting number	Whole number	Integer	Rational number
-5.92	Counting number	Whole number	Integer	Rational number
4	Counting number	Whole number	Integer	Rational number

- 3 Use the clues to find each mystery number.

- a. It is an integer but not a counting number, and it is closer to 0 than -3 . _____
- b. It is a rational number and a whole number, but it is not a counting number. _____
- c. It is a rational number and a counting number.
It is greater than 2 and less than 4. _____

Factors and Multiples

Lesson 1-10

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SRB
102.106

1 List all the factors of each number below.

a. 13 _____

b. 30 _____

c. 42 _____

d. 21 _____

2 Adrian has 75 baseball cards.

He wants the same number of cards in each pile.

How many cards can he have in each pile?

There may be more than one answer. List all possibilities.

3 List the first five multiples of each number below.

a. 3 _____

b. 10 _____

c. 12 _____

d. 17 _____

4 A Ferris wheel makes a full rotation every 80 seconds.

After how many seconds will it make a second rotation? _____

A third? _____

A fourth? _____

A fifth? _____

5 Explain how a factor is different from a multiple.

Math Boxes

Preview for Unit 2

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- 1 Find all the factors and the first four multiples of 36.

Factors: _____

Multiples:

SRB
102-106

SRB
32

- 2 One pinball game costs 25 cents to play. How much will it cost to play 10 pinball games?

Solution: _____

- 3 Change the mixed numbers to fractions.

a. $4\frac{1}{10}$ _____

b. $1\frac{7}{8}$ _____

c. $8\frac{3}{4}$ _____

d. $6\frac{1}{2}$ _____

$30 + 2 = 32$
 $6 \times 5 = 30$
 $\rightarrow 5$

SRB
162-163

SRB
65-69

- 4 Find the equivalent measurement.

a. _____ inches = 7 feet

b. 9 feet = _____ inches

c. _____ feet = 42 inches

d. _____ inches = 5 feet

- 5 Estimate.

$\frac{7}{8} + \frac{5}{6}$

Circle the best answer.

- A. Less than $\frac{1}{2}$
- B. Between $\frac{1}{2}$ and 1
- C. Between $\frac{3}{2}$ and 2
- D. Greater than 2

SRB
176-178

SRB
32

- 6 Jacqueline was playing marbles. After playing two rounds with her friend, she had lost $\frac{1}{3}$ of her marbles. She started with 12 marbles. How many marbles did she have left?

Solution: _____

$\frac{1}{3} * \frac{12}{1} = \frac{12}{3} = 4$

8 remaining
4 marbles lost

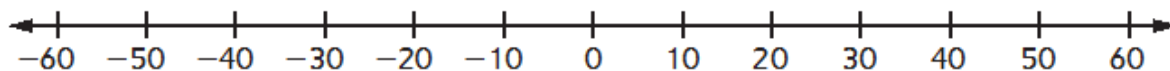
Plotting Numbers

SRB

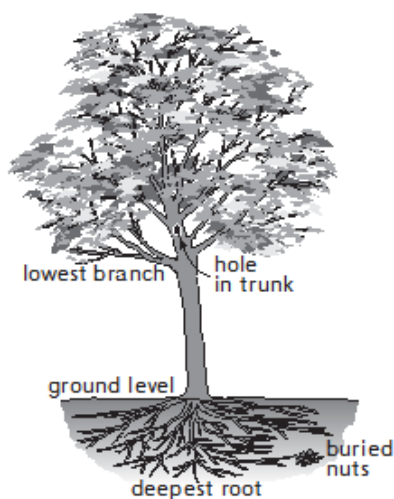
94

- ① Here is a list by month for the record low temperatures in Minneapolis, MN. Plot the letters for the temperatures on the number line below.

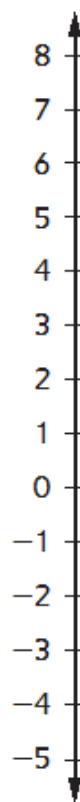
A: January, -57°F	E: May, 4°F	I: September, 10°F
B: February, -60°F	F: June, 15°F	J: October, -16°F
C: March, -50°F	G: July, 24°F	K: November, -45°F
D: April, -22°F	H: August, 21°F	L: December, -57°F



- ② A tree has a trunk, branches, and leaves above ground (positive) and roots below ground (negative). Represent each height as a point on the number line.



- M: Lowest branch at 6 feet
 N: Deepest root at 5 feet
 P: Hole in trunk at 8 feet
 Q: Ground level
 R: Buried nuts at 3 feet



Practice

Solve.

③ $\$0.40 \times 5 =$ _____

④ $\$1.50 \times 3 =$ _____