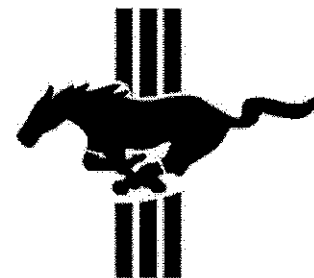


<b>UNIT 3: Order of Operations and Integers</b>		<b>Assignment</b>
10/4 Wed	Order of Operations Pages 1-3	
10/5 Thurs	Introduction to Integers Pages 4-7	
10/6 Fri	Adding Integers Pages 8-11	
10/9 Mon	Adding Integers Pages 12-15	
10/10 Tues	<b>Quiz Order of Operations/Intro to Integers</b> Adding Integer Pages 16-18	
10/11 Wed	Subtracting Integers Pages 19-22	
10/12 Thurs	Subtracting Integers Pages 23-25	
10/13 Fri	<b>Quiz Adding &amp; Subtracting Integers</b> Multiplying and Dividing Integers Pages 26-29	
10/16 Mon	Multiplying and Dividing Integers Pages 30-33	
10/17 Tues	<b>Quiz Multiplying &amp; Dividing Integers</b> Integer Operations Pages 34-37	
10/18 Wed	Review Pages 38-42	
10/19 Thurs	Review Pages 43-46	
10/20 Fri	Test	

**Important Dates:**

**Oct 20 Early Release**

**Oct 31 Teacher Workday**



Order of Operations	
$( ) , [ ] , \{ \}$	Parentheses, Brackets, Braces
$x^a , \sqrt{\quad}$	Exponents, radicals
$\times , \div$	Multiplication, Division
$+ , -$	Addition, Subtraction

P → Parenthesis or grouping symbols

E → Exponents


M → Multiplication } whichever comes first – in order  
 D → Division } from left to right.

A → Addition } whichever comes first – in order  
 S → Subtraction } from left to right.

### Integer rules

You can use these to make flashcards to help you remember the rules

**Addition**



**Same sign—keep and add**

**Different signs subtract, keep the sign of the bigger (whole) number than you'll be exact.**

**Subtraction**


You will turn it into an addition.

**Keep** the first sign

**Change** the second sign

**Change** the third sign

Then you follow the addition rules.




**Multiplication**

$(+) \times (+) = +$

$(-) \times (-) = +$

$(+) \times (-) = -$

$(-) \times (+) = -$




**Division**

$(+) / (+) = +$

$(-) / (-) = +$

$(+) / (-) = -$

$(-) / (+) = -$



## Order of Operations

**Evaluate each expression.**

1)  $(30 - 3) \div 3$

2)  $(21 - 5) \div 8$

3)  $1 + 7^2$

4)  $5 \times 4 - 8$

5)  $8 + 6 \times 9$

6)  $3 + 17 \times 5$

7)  $7 + 12 \times 11$

8)  $15 + 40 \div 20$

9)  $20 + 16 - 15$

10)  $19 - 15 - 3$

11)  $9 \times (3 + 3) \div 6$

12)  $(9 + 18 - 3) \div 8$

$13) 9 + 6 \div (8 - 2)$

$14) 4(4 \div 2 + 4)$

$15) 6 + (5 + 8) \times 4$

$16) 6 \times 6 - (7 + 5)$

$17) (9 \times 2) \div (2 + 1)$

$18) 2 - (4 + 3 - 6)$

$19) 7 \times 7 - (8 - 2)$

$20) 9 - 7 - 6 \div 6$

$21) (4 - 1 + 8 \div 8) \times 5$

$22) (10 \times 2) \div (1 + 1)$

$23) 7 \times 9 - 7 - 3 \times 5$

$24) 8 - 1 - (18 - 2) \div 8$

Name : \_\_\_\_\_

Score : \_\_\_\_\_

## Representation of Integers

Sheet 1

Write an integer to represent each situation mentioned below:

1) James withdrew \$80 from his bank account.

\_\_\_\_\_

2) Harry adds 18 more toy cars to his collection.

\_\_\_\_\_

3) Kevin took 5 crayons to school and lost them all.

\_\_\_\_\_

4) Lillian received \$10 as pocket money from her dad.

\_\_\_\_\_

5) Mr. Johnson was fined \$13 as he failed to pay the telephone bill on time.

\_\_\_\_\_

6) Anna's vegetable patch yielded 26 tomatoes in all.

\_\_\_\_\_

7) Danny distributed 19 cupcakes to his friends on Thanksgiving Day.

\_\_\_\_\_

8) Jim's friend gave him 7 candies.

\_\_\_\_\_

9) Boston recorded a subzero temperature of  $31^{\circ}\text{F}$ .

\_\_\_\_\_

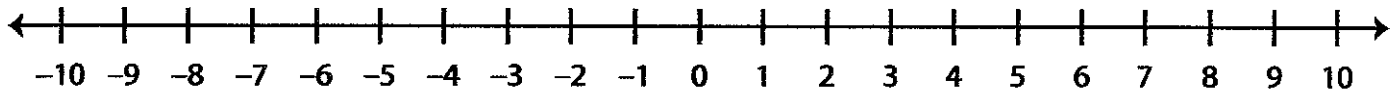
10) The University basket ball match team lost their 12 points lead in the final quarter of the match

**Number Line - Integers**

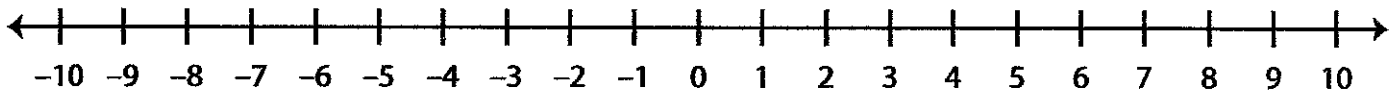
ES1

A) Mark the integers on the number line.

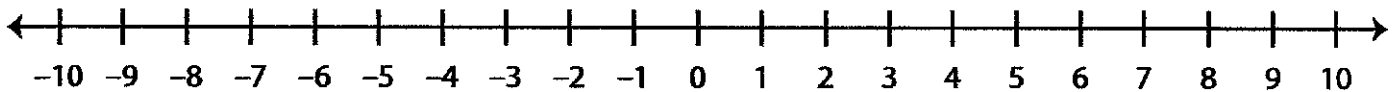
- 1) a) -2    b) 7    c) -5    d) 1



- 2) a) 9    b) -4    c) 3    d) -8



B) Answer the questions using the number line below.



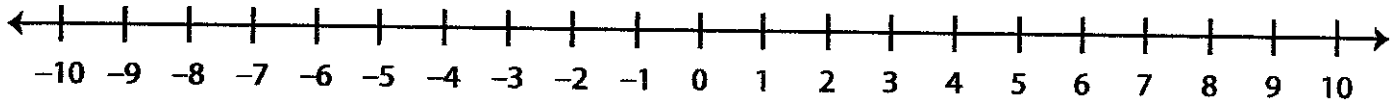
- 1) 2 units to the left of 3 is \_\_\_\_\_
- 2) 6 units to the right of -1 is \_\_\_\_\_
- 3) 4 units to the left of -4 is \_\_\_\_\_
- 4) 3 units to the right of 7 is \_\_\_\_\_
- 5) 1 unit to the left of 10 is \_\_\_\_\_
- 6) 5 units to the right of -6 is \_\_\_\_\_
- 7) 8 units to the left of 5 is \_\_\_\_\_

# Ordering Integers

Sheet 1

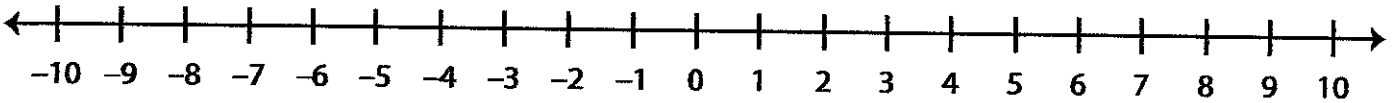
A) Mark the integers on the number line and order them from the least to the greatest.

1)  $-9, 4, -5, 2$



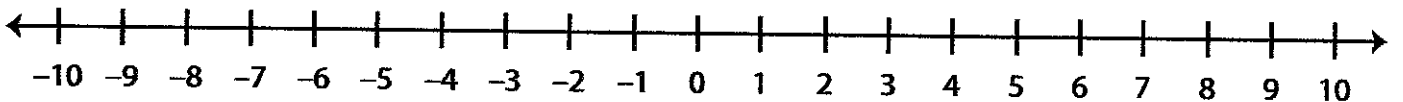
\_\_\_\_\_

2)  $10, 0, -3, -10$



\_\_\_\_\_

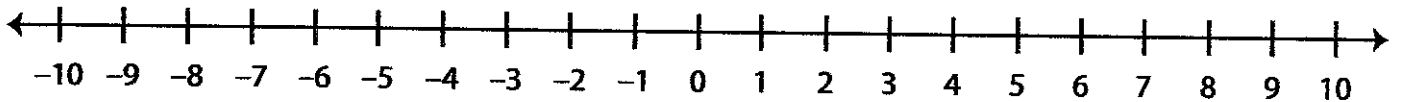
3)  $-7, 6, -8, 1$



\_\_\_\_\_

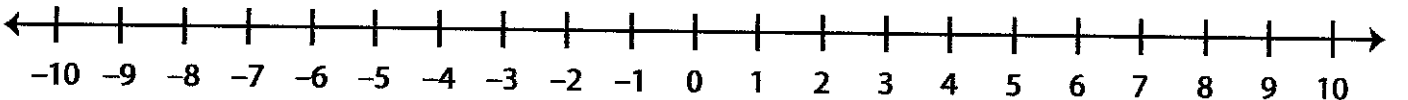
B) Mark the integers on the number line and order them from the greatest to the least.

1)  $3, -6, -4, 5$



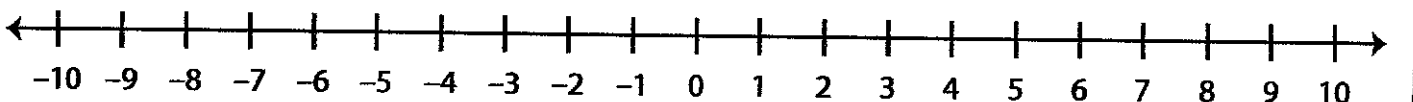
\_\_\_\_\_

2)  $-2, -1, 9, -7$



\_\_\_\_\_

3)  $-5, 7, 8, -9$



## Practice 1-2 The Order of Operations

Simplify each expression.

- |  |                                  |
|--|----------------------------------|
| 1. $3 + 15 - 5 \cdot 2$ _____          | 2. $5 \cdot 6 + 2 \cdot 4$ _____ |
| 3. $48 \div 8 - 1$ _____               | 4. $68 - 12 \div 2 \div 3$ _____ |
| 5. $6(2 + 7)$ _____                    | 6. $25 - (6 \cdot 4)$ _____      |
| 7. $3[9 - (6 - 3)] - 10$ _____         | 8. $60 \div (3 + 12)$ _____      |
| 9. $4 - 2 + 6 \cdot 2$ _____           | 10. $18 \div (5 - 2)$ _____      |
| 11. $\frac{16 + 24}{30 - 22}$ _____    | 12. $2[4(9 - 7) + 1]$ _____      |
| 13. $(8 \div 8 + 2 + 11) \div 2$ _____ | 14. $9 + 3 \cdot 4$ _____        |
| 15. $18 \div 3 \cdot 5 - 4$ _____      | 16. $10 + 28 \div 14 - 5$ _____  |

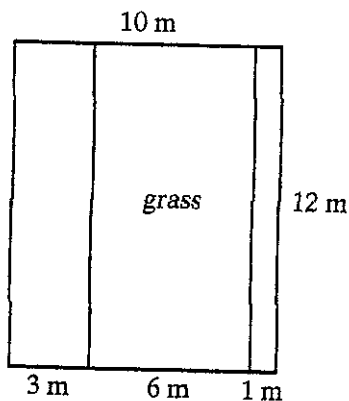
Insert grouping symbols to make each number sentence true.

- |                                 |                              |
|---------------------------------|------------------------------|
| 17. $3 + 5 \cdot 8 = 64$        | 18. $4 \cdot 6 - 2 + 7 = 23$ |
| 19. $10 \div 3 + 2 \cdot 4 = 8$ | 20. $3 + 6 \cdot 2 = 18$     |

A city park has two walkways with a grassy area in the center, as shown in the diagram.

21. Write an expression for the area of the sidewalks, using subtraction.
- \_\_\_\_\_

22. Write an expression for the area of the sidewalks, using addition.
- \_\_\_\_\_



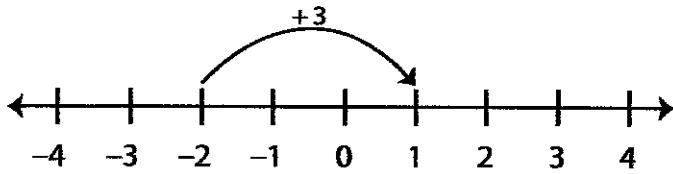
Compare. Use  $>$ ,  $<$ , or  $=$  to complete each statement.

- |  |  |
|--|--|
| 23. $(24 - 8) \div 4$ <input type="checkbox"/> $24 - 8 \div 4$   | 24. $3 \cdot (4 - 2) \cdot 5$ <input type="checkbox"/> $3 \cdot 4 - 2 \cdot 5$   |
| 25. $(22 + 8) \div 2$ <input type="checkbox"/> $22 + 8 \div 2$   | 26. $20 \div 2 + 8 \cdot 2$ <input type="checkbox"/> $20 \div (2 + 8) \cdot 2$   |
| 27. $11 \cdot 4 - 2$ <input type="checkbox"/> $11 \cdot (4 - 2)$ | 28. $(7 \cdot 3) - (4 \cdot 2)$ <input type="checkbox"/> $7 \cdot 3 - 4 \cdot 2$ |

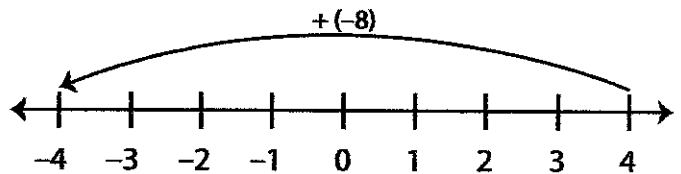


# Number Line - Adding Integers

**Example 1:**  $-2 + 3 = 1$

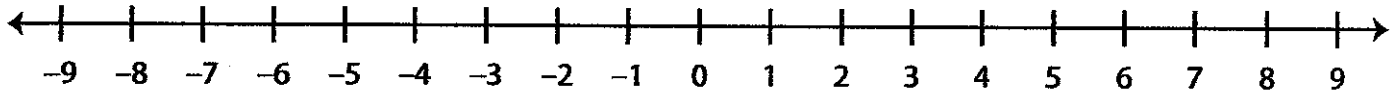


**Example 2:**  $4 + (-8) = -4$

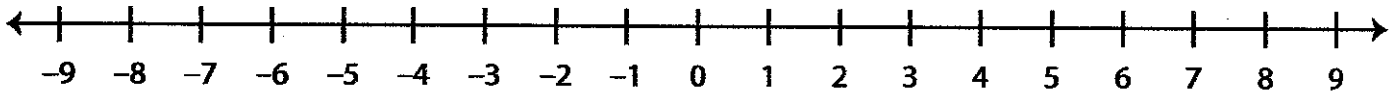


Use the number line to find the sum.

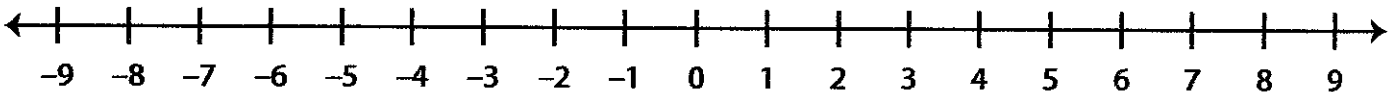
1)  $4 + (-5) =$  \_\_\_\_\_



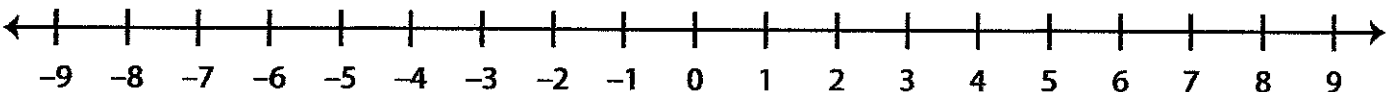
2)  $-7 + 2 =$  \_\_\_\_\_



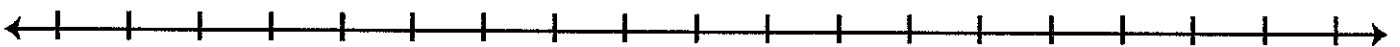
3)  $-3 + (-4) =$  \_\_\_\_\_



4)  $1 + 7 =$  \_\_\_\_\_

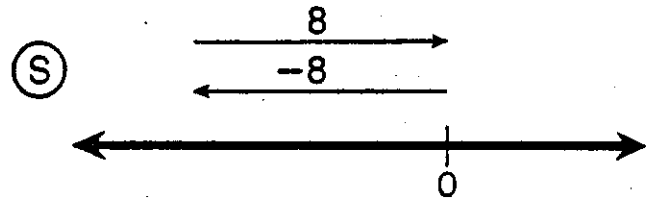
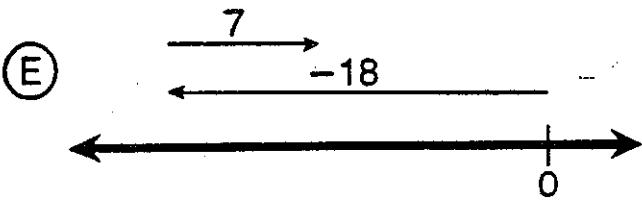
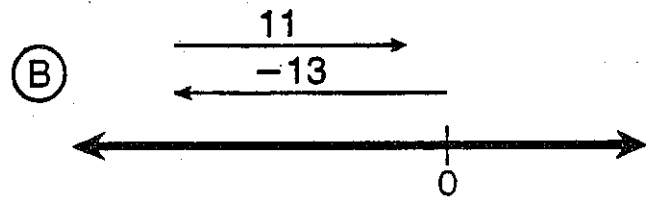
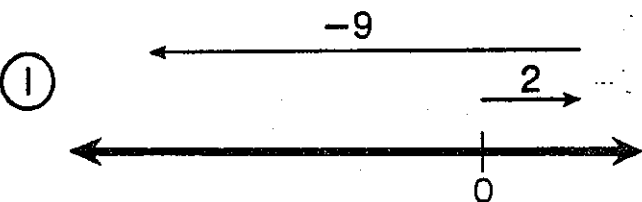
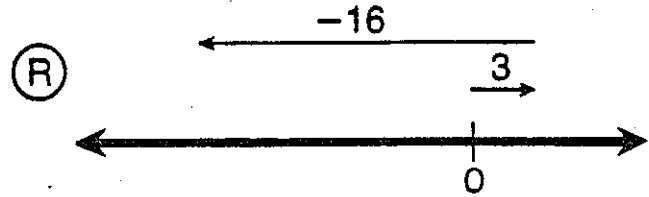
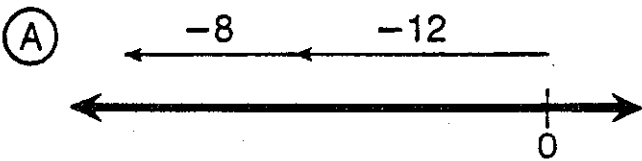
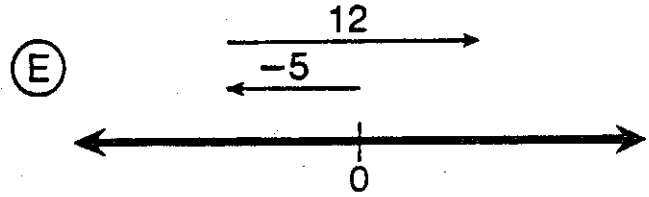
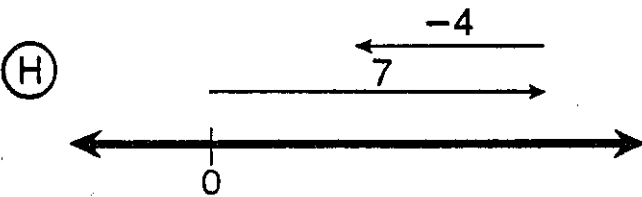
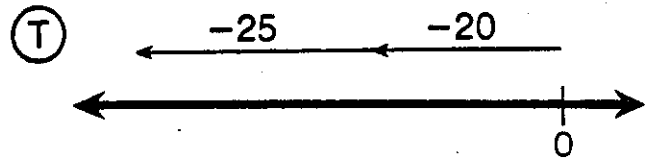
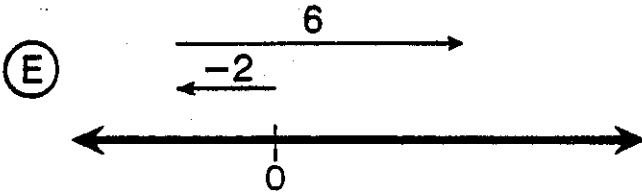
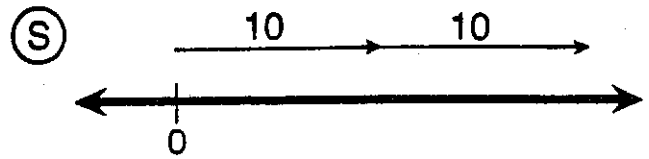
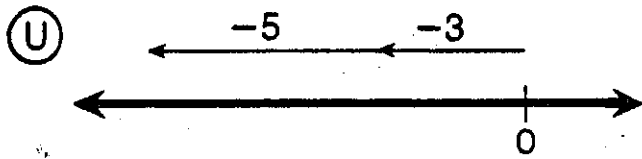


5)  $3 + (-12) =$  \_\_\_\_\_



# How Is a Fast Racehorse Like a Dessert?

For each exercise, identify the integer that results from combining the two arrows. Write the letter of each exercise below the corresponding integer at the bottom of the page. You'll learn the sweet truth!



3	7	-7	20	-20	0	-8	-13	-11	-2	4	-45
---	---	----	----	-----	---	----	-----	-----	----	---	-----

9

# Adding Integers

Add each equation below with positive and negative integers.

1.  $16 + 6 =$

\_\_\_\_\_

2.  $1 + (-4) =$

\_\_\_\_\_

3.  $(-5) + (-3) =$

\_\_\_\_\_

4.  $(-14) + 5 =$

\_\_\_\_\_

5.  $(-3) + 3 =$

\_\_\_\_\_

6.  $(-7) + 10 =$

\_\_\_\_\_

7.  $2 + 9 =$

\_\_\_\_\_

8.  $(-8) + 6 =$

\_\_\_\_\_

9.  $(-2) + (-4) =$

\_\_\_\_\_

10.  $(-5) + 10 =$

\_\_\_\_\_

11.  $(-12) + 3 =$

\_\_\_\_\_

12.  $(-8) + 13 =$

\_\_\_\_\_

13.  $9 + (-14) =$

\_\_\_\_\_

14.  $(-16) + (-11) =$

\_\_\_\_\_

Name: \_\_\_\_\_

Date: \_\_\_\_\_

# Integer Addition Chart

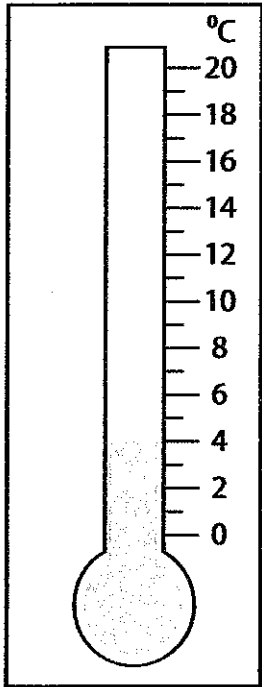
+	-5	-4	-3	-2	-1	0	1	2	3	4	5
5	0	1	2	3	4	5	6	7	8	9	10
4	-1	0	1	2	3	4	5	6	7	8	9
3	-2	-1	0	1	2	3	4	5	6	7	8
2	-3	-2	-1	0	1	2	3	4	5	6	7
1	-4	-3	-2	-1	0	1	2	3	4	5	6
0	-5	-4	-3	-2	-1	0	1	2	3	4	5
-1	-6	-5	-4	-3	-2	-1	0	1	2	3	4
-2	-7	-6	-5	-4	-3	-2	-1	0	1	2	3
-3	-8	-7	-6	-5	-4	-3	-2	-1	0	1	2
-4	-9	-8	-7	-6	-5	-4	-3	-2	-1	0	1
-5	-10	-9	-8	-7	-6	-5	-4	-3	-2	-1	0



# Add and Subtract Integers - Thermometer

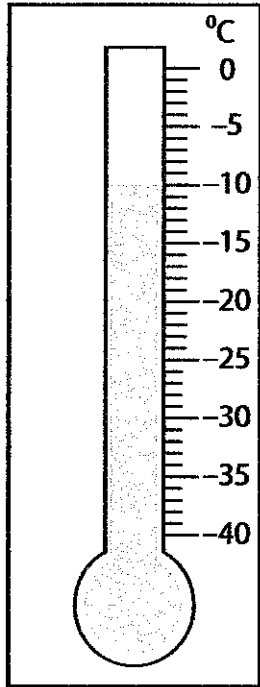
Find the new reading for each thermometer, if there is a

1) rise by  $13^{\circ}\text{C}$ .



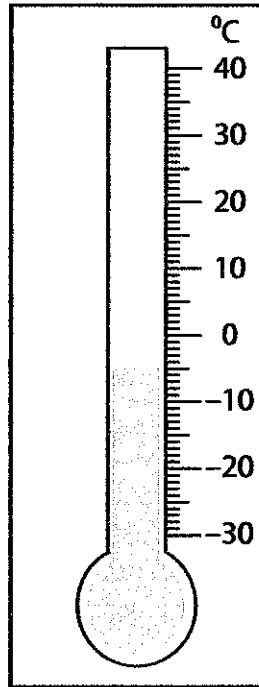
\_\_\_\_\_

2) fall by  $26^{\circ}\text{C}$ .



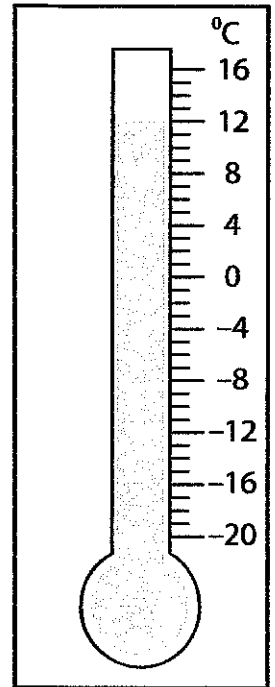
\_\_\_\_\_

3) rise by  $45^{\circ}\text{C}$ .



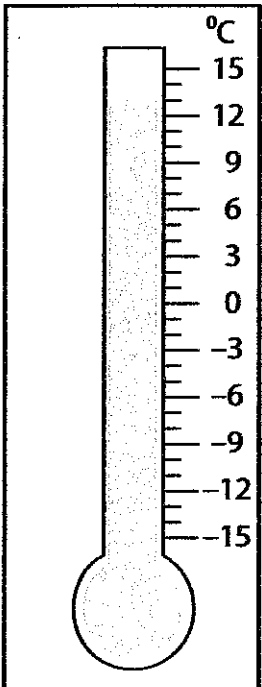
\_\_\_\_\_

4) fall by  $8^{\circ}\text{C}$ .



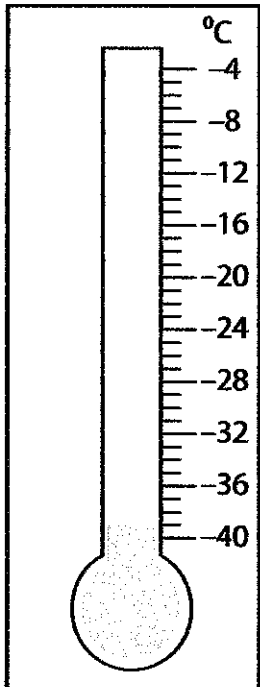
\_\_\_\_\_

5) fall by  $28^{\circ}\text{C}$ .



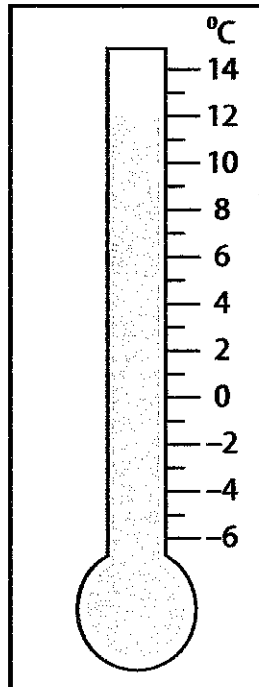
\_\_\_\_\_

6) rise by  $31^{\circ}\text{C}$ .



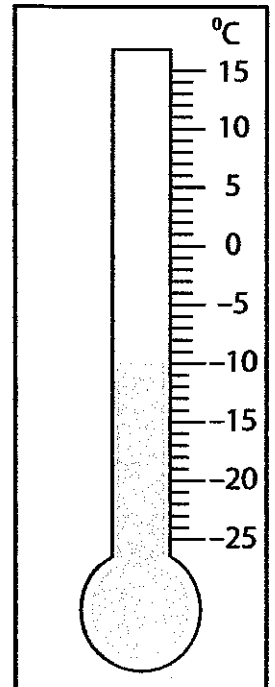
\_\_\_\_\_

7) fall by  $14^{\circ}\text{C}$ .



\_\_\_\_\_

8) rise by  $20^{\circ}\text{C}$ .



\_\_\_\_\_

## Reteaching 1-5 Adding Integers

Use tiles and the rules for adding integers to find each sum.

a.  $-4 + -3$



Four negative tiles plus 3 negative tiles gives 7 negative tiles.

$$-4 + -3 = -7$$

The sum of two negative integers is negative.

b.  $-8 + 3$



Remove zero  
pairs

Since the signs of the integers are different, you must remove zero pairs. The number of tiles left is the number of negative tiles  $|-8|$  minus the number of positive tiles  $|3|$ . Thus, you can always subtract the absolute values of the numbers to find how many tiles will be left.

$$|-8| - |3| = 5$$

Since there are more negative tiles than positive tiles,  $|-8| > |3|$ , there are negative tiles left after you subtract zero pairs. Thus, the sum is negative.

$$-8 + 3 = -5$$

Use rules or tiles to find each sum.

1.  $9 + (-12)$

\_\_\_\_\_

2.  $-4 + 10$

\_\_\_\_\_

3.  $-1 + (-8)$

\_\_\_\_\_

4.  $-6 + (-11)$

\_\_\_\_\_

5.  $-5 + 15$

\_\_\_\_\_

6.  $2 + (-14)$

\_\_\_\_\_

7.  $(-3) + (-6)$

\_\_\_\_\_

8.  $-(-2) + 9$

\_\_\_\_\_

9.  $(-2) + (-4)$

\_\_\_\_\_

10.  $-5 + 4$

\_\_\_\_\_

11.  $7 + (-2)$

\_\_\_\_\_

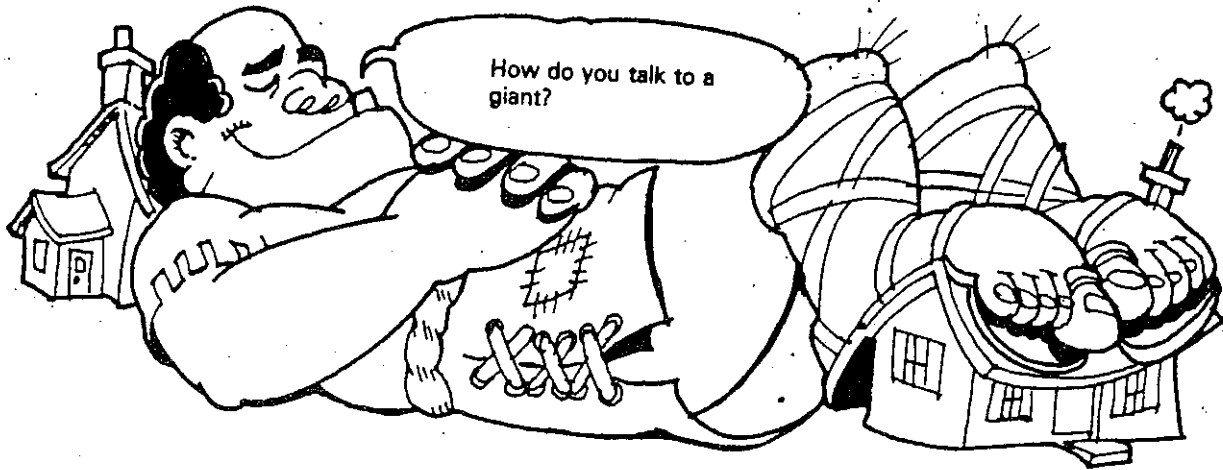
12.  $16 + (-6)$

\_\_\_\_\_

NAME \_\_\_\_\_

# Practice Worksheet 4-3

Use after page 97.



To check your answer:

- Use a ruler to match each sum with an equivalent sum.
- Each line you draw will cross a letter.
- The letters without lines through them spell out the answer.

1. $+7 + +2$		$-2 + -1$		$+3 + +1$
2. $+6 + -5$		$+5 + +6$	(H)	$+5 + +4$
3. $-9 + +6$	(U)	$+7 + -5$	(B)	$-10 + +2$
4. $-3 + -5$	(L)	$+10 + -1$	(I)	$+13 + -2$
5. $+7 + +4$	(L)	$+1 + 0$	(G)	$-5 + +2$
6. $-3 + +7$	(K)	$-5 + -1$	(H)	$-7 + +2$
7. $-9 + +11$	(F)	$-6 + +10$	(A)	$-8 + +10$
8. $+5 + -10$	(E)	$-6 + -2$	(W)	$-3 + +4$
9. $-13 + -6$	(O)	$-10 + +10$	(N)	$-20 + +1$
10. $-12 + +6$	(T)	$-10 + -9$	(L)	$+3 + -3$
11. $-7 + +7$	(S)	$-4 + -1$	(R)	$-8 + -2$
12. $+8 + -1$	(I)	$-20 + +2$	(O)	$-9 + +3$
13. $-9 + -9$	(W)	$+5 + -15$	(D)	$-10 + -8$
14. $-6 + -4$	(T)	$-3 + +10$	(W)	$+6 + +1$
15. $+8 + -3$	(O)	$-5 + -2$	(L)	$-3 + -4$
16. $-9 + +5$	(R)	$+1 + -10$	(S)	$-6 + +2$
17. $-6 + -3$	(N)	$+2 + +3$	(A)	$-4 + +9$
18. $-10 + +3$	(T)	$+1 + -5$	(E)	$-13 + +4$

Answer: \_\_\_\_\_

# Adding Integers

Find the missing addend to each equation.

1. \_\_\_\_\_ + (-2) = 8

\_\_\_\_\_

2. (-9) + \_\_\_\_\_ = (-15)

\_\_\_\_\_

3. (-6) + \_\_\_\_\_ = (-11)

\_\_\_\_\_

4. \_\_\_\_\_ + (-2) = (-5)

\_\_\_\_\_

5. \_\_\_\_\_ + (-4) = 10

\_\_\_\_\_

6. \_\_\_\_\_ + (-6) = (-12)

\_\_\_\_\_

7. 15 + \_\_\_\_\_ = 5

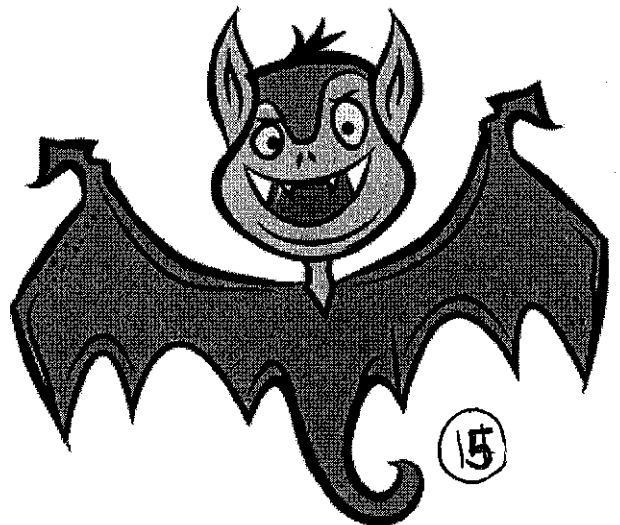
\_\_\_\_\_

8. \_\_\_\_\_ + 9 = 7

\_\_\_\_\_

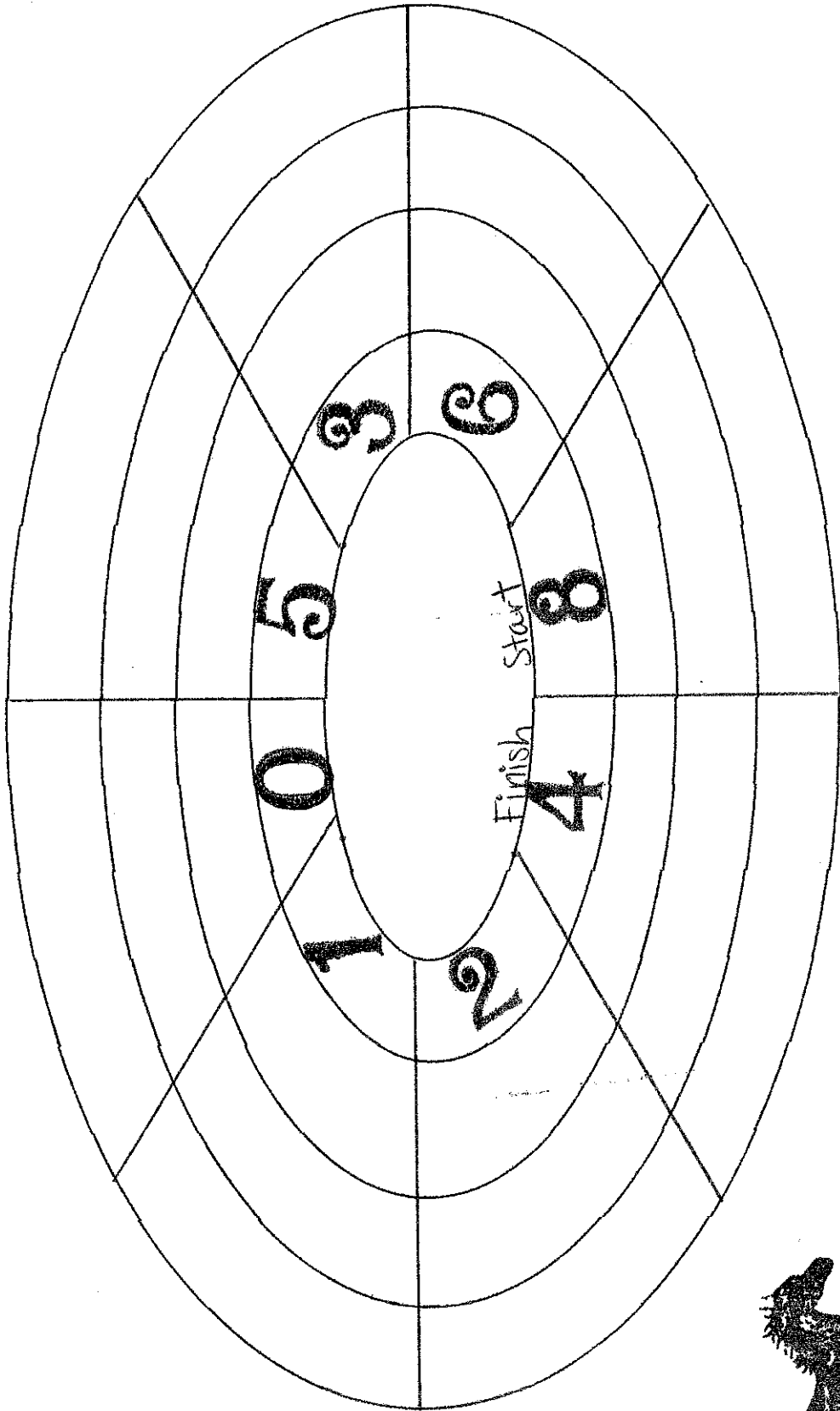
9. (-4) + \_\_\_\_\_ = 11

\_\_\_\_\_





W  
C  
A  
R  
T  
E  
C  
A  
R



# What Does a Baby Get If It Sits on a Hot Stove?

Do each exercise and find your answer in the rectangle below. Cross out the box containing that answer. When you finish, there will be five boxes not crossed out. Print the letters from these boxes in the spaces at the bottom of the page.

- |                              |                                     |
|------------------------------|-------------------------------------|
| ① $14 + (-30) + 23 + (-9)$   | ⑦ $-523 + (-98) + 800$              |
| ② $-19 + (-42) + 36 + (-12)$ | ⑧ $303 + (-760) + 175$              |
| ③ $48 + 3 + (-18) + (-10)$   | ⑨ $-6 + (-7) + 8 + (-7) + 9 + (-1)$ |
| ④ $-8 + (-60) + (-17) + 44$  | ⑩ $6 + (-5) + 7 + 4 + (-9) + (-3)$  |
| ⑤ $27 + 6 + (-55) + 36$      | ⑪ $-8432 + (-1150) + 3760$          |
| ⑥ $245 + (-907)$             |                                     |

- |  |   |
|--|---|
| ⑫ The Vultures football team made the following gains on four plays: 14 yards, -32 yards, 3 yards, and -19 yards. What was the net change in position of the Vultures as a result of the four plays? | ⑬ Bongo had a balance of \$345.28 in his checking account. During the week he wrote checks for \$65.08, \$24.50, and \$118.95. He then made a deposit of \$56.00. What was his balance after the deposit? |
|--|---|

- ⑭ The net profit for four months of T.N.T. Corporation is given in the table below:

Month	Net Profit
January	\$16,800
February	- 4,500
March	39,900
April	- 12,000

What was the net profit for the four-month period?

- ⑮ A cross country skier made the following changes in altitude during a 5-hour period: up 28 meters, down 124 meters, down 40 meters, up 75 meters, down 225 meters. What was the skier's net change in altitude?

- ⑯ At its first stop, a bus picked up 17 people. At the next stop, 12 people got on and 7 got off. At the third stop, 21 people got on and 13 got off. At the fourth stop, 5 people got on and 18 got off. How many passengers were then on the bus?

IT -5822	HO 17	TB -34 yds	AD \$43,500	OT \$40,200	UR -2	NO 23
IA -5632	NO -282	ST -41	PE -257 m	ED 179	RO -662	TO -286 m
MC \$192.75	RA \$182.95	TE 14	ST -4	OP -37	SH 19 yds	OT 0



# Practice 1-5 Adding Integers

Write a numerical expression for each of the following. Then find the sum.

1. climb up 26 steps, then climb down 9 steps

\_\_\_\_\_

2. earn \$100, spend \$62, earn \$35, spend \$72

\_\_\_\_\_

Find each sum.

3.  $-8 + (-3)$

\_\_\_\_\_

4.  $6 + (-6)$

\_\_\_\_\_

5.  $-12 + (-17)$

\_\_\_\_\_

6.  $9 + (-11)$

\_\_\_\_\_

7.  $-4 + (-6)$

\_\_\_\_\_

8.  $18 + (-17)$

\_\_\_\_\_

9.  $-8 + 8 + (-11)$

\_\_\_\_\_

10.  $12 + (-7) + 3 + (-8)$

\_\_\_\_\_

11.  $-15 + 7 + 15$

\_\_\_\_\_

12.  $0 + (-11)$

\_\_\_\_\_

13.  $6 + (-5) + (-4)$

\_\_\_\_\_

14.  $-5 + (-16) + 5 + 8 + 16$

\_\_\_\_\_

Without adding, tell whether each sum is positive, negative, or zero.

15.  $192 + (-129)$

\_\_\_\_\_

16.  $-417 + (-296)$

\_\_\_\_\_

17.  $-175 + 87$

\_\_\_\_\_

Evaluate each expression for  $n = -12$ .

18.  $n + 8$

\_\_\_\_\_

19.  $n + (-5)$

\_\_\_\_\_

20.  $12 + n$

\_\_\_\_\_

Compare. Write  $>$ ,  $<$ , or  $=$  to complete each statement.

21.  $-7 + 5$    $3 + (-6)$

22.  $4 + (-9)$    $6 + (-7) + (-4)$

23. An elevator went up 15 floors, down 9 floors, up 11 floors, and down 19 floors. Find the net change. \_\_\_\_\_

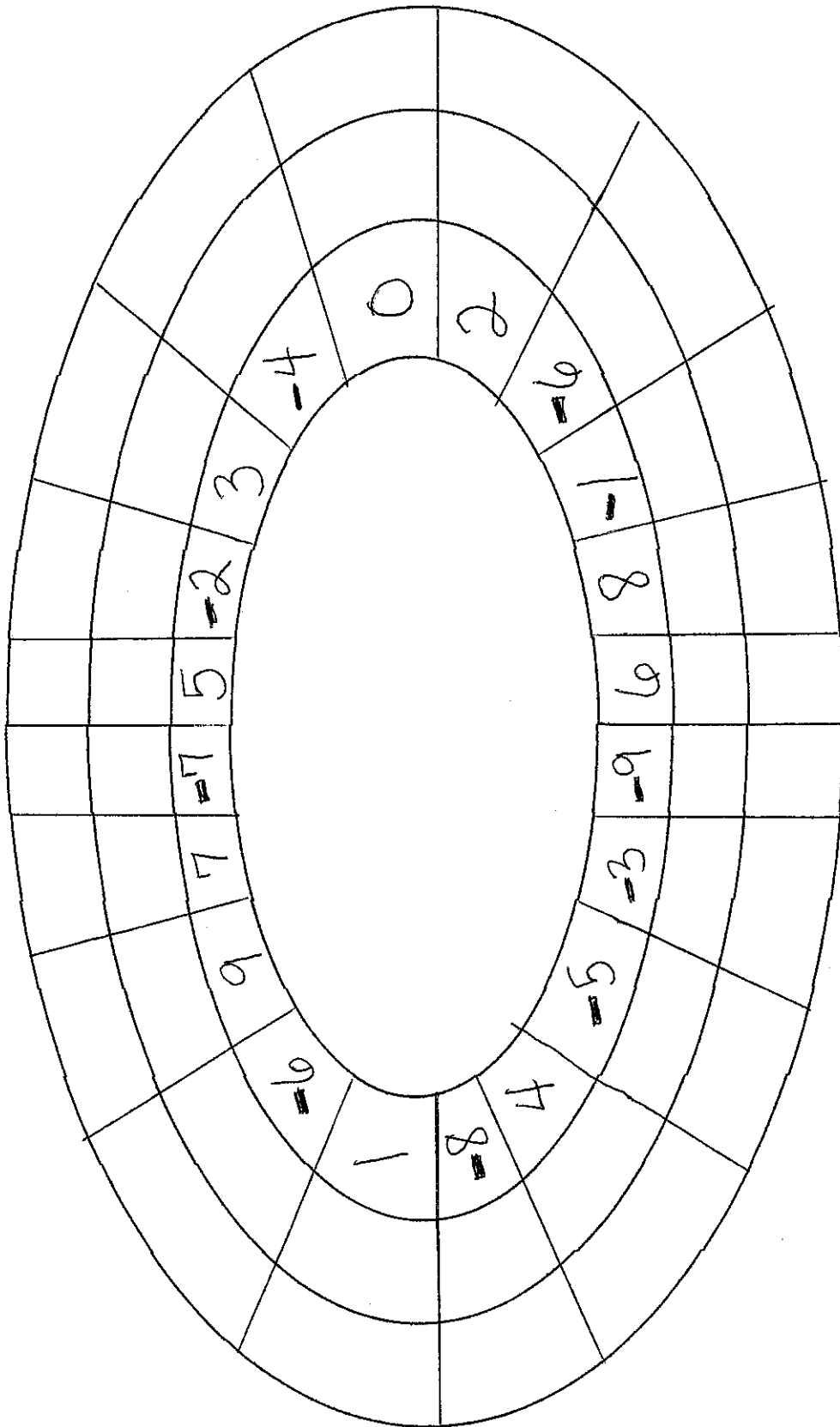
24. The price of a share of stock started the day at \$37. During the day it went down \$3, up \$1, down \$7, and up \$4. What was the price of a share at the end of the day?

\_\_\_\_\_

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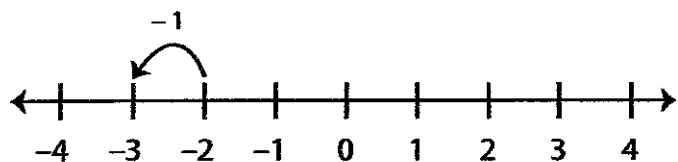
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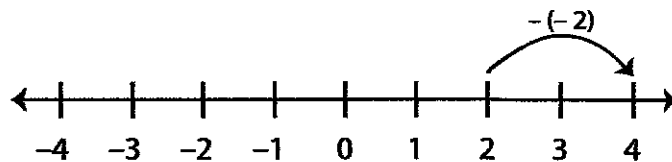


# Number Line - Subtracting Integers

**Example 1:**  $-2 - 1 = -3$

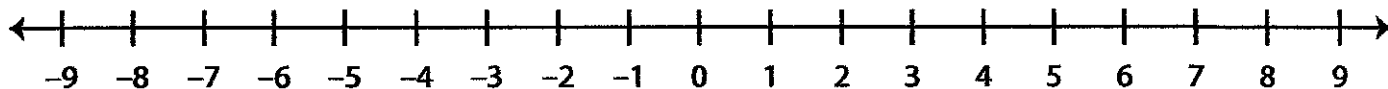


**Example 2:**  $2 - (-2) = 4$

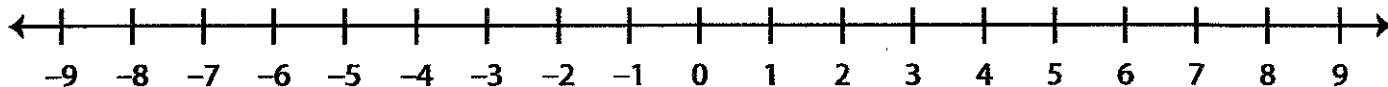


Use the number line to find the difference.

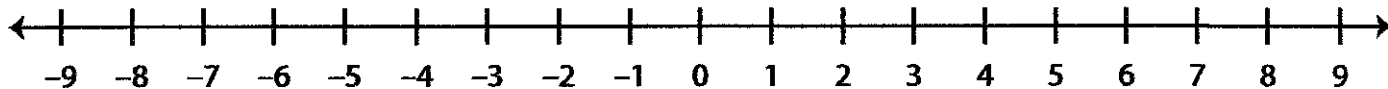
1)  $1 - 10 =$  \_\_\_\_\_



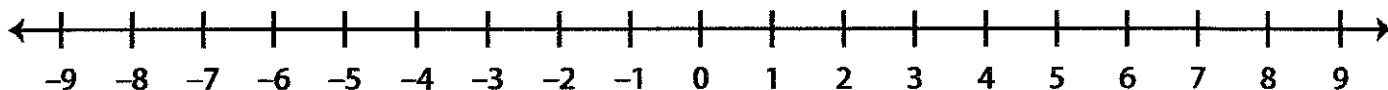
2)  $0 - (-7) =$  \_\_\_\_\_



3)  $-6 - 2 =$  \_\_\_\_\_



4)  $5 - 4 =$  \_\_\_\_\_



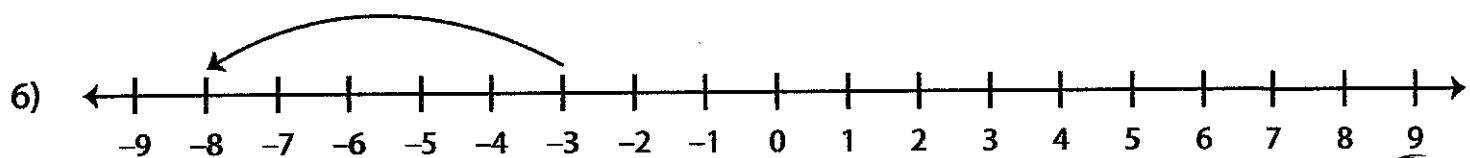
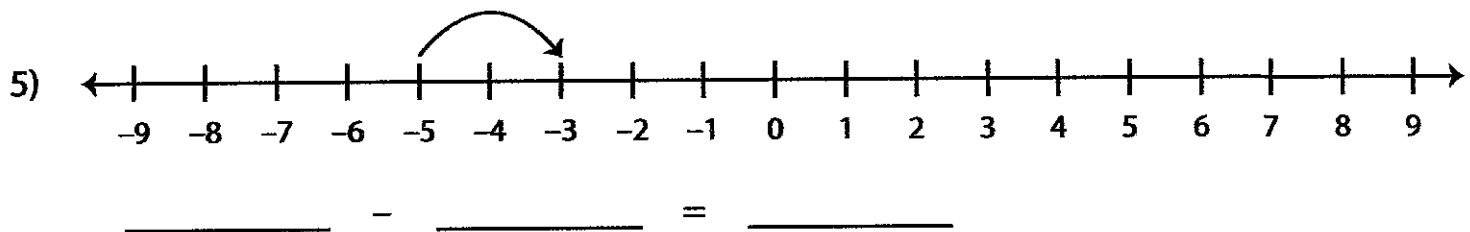
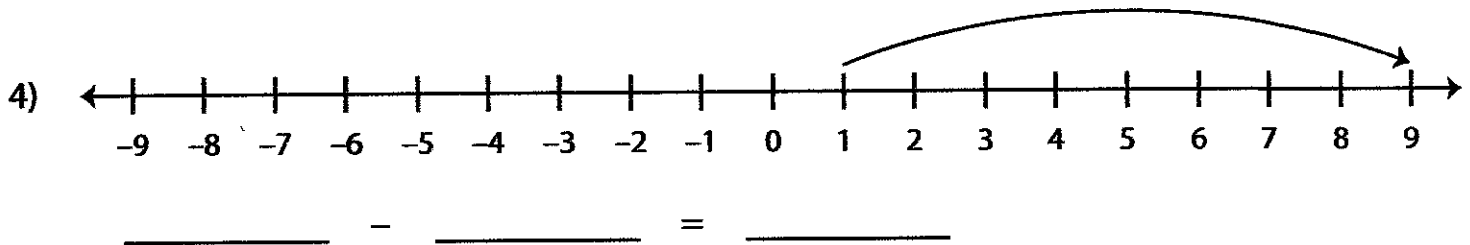
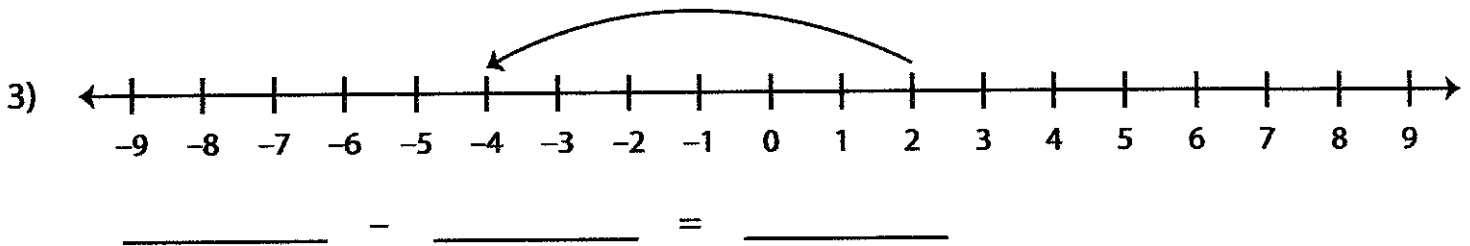
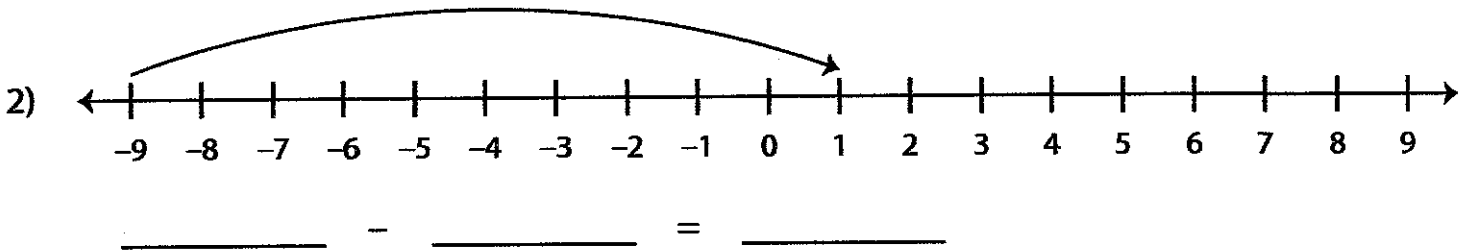
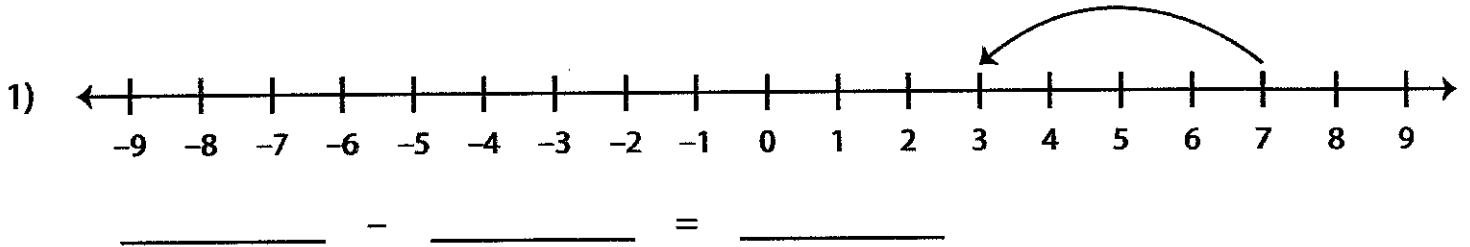
5)  $-8 - (-3) =$  \_\_\_\_\_



## Number Line - Subtraction Equation

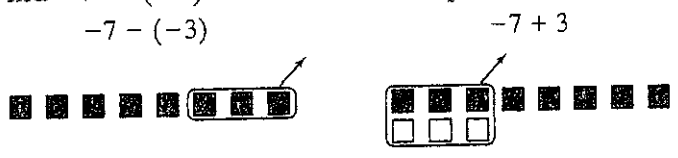
Sheet 1

Write the subtraction equation that is represented on each number line.



## Reteaching 1-6 Subtracting Integers

a. Find  $-7 - (-3)$  and  $-7 + 3$ . Compare.

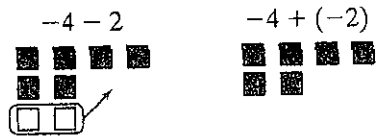


Start with 7 negative tiles and take away 3 negative tiles.

Remove zero pairs.

With both you start with 7 negative tiles. Taking away 3 negative tiles has the same effect as adding 3 positive tiles and removing zero pairs.  
 $-7 - (-3) = -7 + 3 = -4$

b. Find  $-4 - 2$  and  $-4 + (-2)$ . Compare.



With both you start with 4 negative tiles. Adding two zero pairs and taking away two positive tiles has the same effect as adding two negative tiles.

$$-4 - 2 = -4 + (-2) = -6$$

**Use rules for subtracting integers to find each difference. Use tiles to help.**

1.  $-5 - (-3) = -5 + \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$
2.  $-8 - 6 = -8 + \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$
3.  $3 - (-9) = 3 + \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$
4.  $-2 - (-7) = -2 + \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$
5.  $4 - 10 = 4 + \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$
6.  $1 - (-6) = 1 + \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$
7.  $-9 - 5 = -9 + \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$
8.  $-6 - (-2) = -6 + \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$
9.  $7 - 8 = 7 + \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

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# What should you do when you can't sleep?

Do any exercise below and find your answer in the corresponding answer column. The letter of the exercise goes in the box that contains the number of the answer. Keep working and you will discover the answer to the title question.

<b>T</b> $3 - 7 =$	<b>E</b> $-5 - -15 =$	<b>10</b> 17	<b>E</b> $-3 - -1 =$	<b>38</b> 18
<b>R</b> $-2 - 5 =$	<b>R</b> $8 - -9 =$	<b>24</b> 8	<b>C</b> $-7 - 8 =$	<b>25</b> -10
<b>E</b> $7 - -1 =$	<b>D</b> $3 - 13 =$	<b>12</b> 2	<b>S</b> $2 - -5 =$	<b>26</b> -2
<b>U</b> $9 - 3 =$	<b>O</b> $-2 - -4 =$	<b>4</b> 10	<b>M</b> $13 - 4 =$	<b>42</b> 0
<b>O</b> $-5 - -10 =$	<b>Y</b> $-6 - 6 =$	<b>17</b> -8	<b>O</b> $-2 - -20 =$	<b>33</b> -15
<b>F</b> $1 - 11 =$	<b>E</b> $15 - 7 =$	<b>27</b> -10	<b>F</b> $-9 - -9 =$	<b>1</b> 9
<b>H</b> $-8 - -2 =$	<b>D</b> $-9 - -1 =$	<b>30</b> -12	<b>B</b> $6 - 16 =$	<b>8</b> 7
* * * * *				
<b>C</b> $4 - -4 =$	<b>O</b> $5 - 5 =$	<b>35</b> -1	<b>O</b> $-7 - 4 =$	<b>3</b> 14
<b>O</b> $-3 - -7 =$	<b>E</b> $-4 - 10 =$	<b>20</b> 0	<b>E</b> $4 - 7 =$	<b>16</b> -3
<b>A</b> $-1 - 12 =$	<b>T</b> $-9 - -5 =$	<b>7</b> 4	<b>L</b> $-4 - -7 =$	<b>36</b> -14
<b>E</b> $2 - 9 =$	<b>N</b> $6 - 7 =$	<b>28</b> 17	<b>P</b> $7 - -4 =$	<b>6</b> 3
<b>F</b> $17 - 4 =$	<b>S</b> $15 - -2 =$	<b>14</b> -17	<b>G</b> $-7 - -7 =$	<b>40</b> -11
<b>O</b> $-11 - -2 =$	<b>O</b> $-8 - -12 =$	<b>22</b> -4	<b>V</b> $7 - -7 =$	<b>18</b> 0
<b>T</b> $6 - -3 =$	<b>H</b> $-11 - 6 =$	<b>19</b> -14	<b>D</b> $-7 - 7 =$	<b>39</b> 11

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42



## Practice 1-6 Subtracting Integers

Use rules to find each difference.

- |                          |                             |                                 |
|--------------------------|-----------------------------|---------------------------------|
| 1. $8 - 12$<br>_____     | 2. $13 - 6$<br>_____        | 3. $9 - (-12)$<br>_____         |
| 4. $57 - 39$<br>_____    | 5. $-173 - 162$<br>_____    | 6. $71 - (123)$<br>_____        |
| 7. $51 - 89$<br>_____    | 8. $-222 - (-117)$<br>_____ | 9. $843 - 677$<br>_____         |
| 10. $-98 - 183$<br>_____ | 11. $366 - (-429)$<br>_____ | 12. $-83 - (-48) - 65$<br>_____ |

Find each difference.

- |                         |                            |                                |
|-------------------------|----------------------------|--------------------------------|
| 13. $6 - 9$<br>_____    | 14. $14 - 8$<br>_____      | 15. $-15 - 3$<br>_____         |
| 16. $-25 - 25$<br>_____ | 17. $-16 - (-16)$<br>_____ | 18. $32 - (-17) - 32$<br>_____ |

Round each number. Then estimate each sum or difference.

- |                             |                            |                              |
|-----------------------------|----------------------------|------------------------------|
| 19. $-57 + (-98)$<br>_____  | 20. $448 - 52$<br>_____    | 21. $-191 + (-511)$<br>_____ |
| 22. $-361 - (-58)$<br>_____ | 23. $888 + 1,177$<br>_____ | 24. $-484 - 1,695$<br>_____  |

Write a numerical expression for each phrase. Then simplify.

25. A balloon goes up 2,300 ft, then goes down 600 ft.  
\_\_\_\_\_
26. You lose \$50, then spend \$35.  
\_\_\_\_\_
27. The Glasers had \$317 in their checking account. They wrote checks for \$74, \$132, and \$48. What is their checking account balance?  
\_\_\_\_\_

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Name : \_\_\_\_\_

Score : \_\_\_\_\_

Teacher : \_\_\_\_\_

Date : \_\_\_\_\_

---

1 )  $(-49) - (-79) =$

2 )  $(+48) - (-89) =$

3 )  $(-75) - (+25) =$

4 )  $(-88) - (-89) =$

5 )  $(+39) - (+36) =$

6 )  $(+86) - (-33) =$

7 )  $(+53) - (-47) =$

8 )  $(-56) - (-12) =$

9 )  $(-86) - (+62) =$

10)  $(-93) - (+10) =$

11)  $(-85) - (-76) =$

12)  $(+16) - (+32) =$

13)  $(+43) - (+11) =$

14)  $(+16) - (+72) =$

15)  $(-65) - (+56) =$

16)  $(+30) - (+62) =$

17)  $(+42) - (-30) =$

18)  $(-10) - (-72) =$

19)  $(-29) - (+14) =$

20)  $(+98) - (-42) =$



## Reteaching 1-9 Multiplying and Dividing Integers

Multiplying and dividing integers is very similar to multiplying and dividing whole numbers. Just remember the two basic rules for determining the sign of the product or quotient.

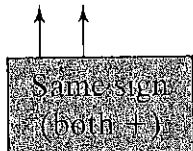
**Rule 1:** The product or quotient of two integers with the *same sign* is positive.

**Rule 2:** The product or quotient of two integers with *opposite signs* is negative.

Find each product or quotient.

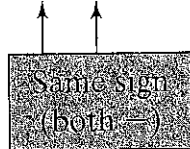
a.  $5 \cdot 7$

$$5 \cdot 7 = 35$$



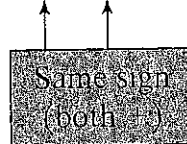
b.  $-2(-3)$

$$-2(-3) = 6$$



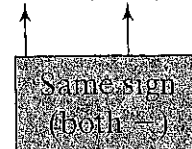
c.  $15 \div 3$

$$15 \div 3 = 5$$



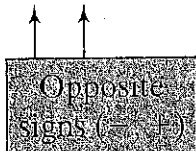
d.  $-40 \div (-10)$

$$-40 \div (-10) = 4$$



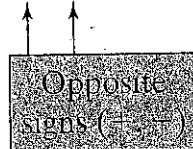
e.  $-5 \cdot 7$

$$-5 \cdot 7 = -35$$



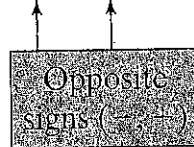
f.  $2(-3)$

$$2(-3) = -6$$



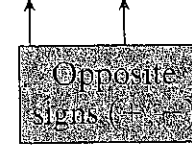
g.  $-15 \div 3$

$$-15 \div 3 = -5$$



h.  $40 \div (-10)$

$$40 \div (-10) = -4$$



Complete the table. The first row has been done for you.

	Same or Opposite Sign?	Sign of Product or Quotient	Product or Quotient
1. $-5 \cdot 12$	Opposite	Negative	-60
2. $-91 \div (-13)$			
3. $6 \cdot 8$			
4. $72 \div -9$			
5. $-3(-6)$			
6. $-18 \div 2$			
7. $11 \cdot (-5)$			
8. $52 \div 4$			
9. $-12(6)$			

Name: \_\_\_\_\_

Score: \_\_\_\_\_

## Multiplying Integers

Sheet 1

Find the product.

1)  $2 \times 11 =$  \_\_\_\_\_

2)  $(-14) \times (-9) =$  \_\_\_\_\_

3)  $(-4) \times (-6) =$  \_\_\_\_\_

4)  $(-12) \times 5 =$  \_\_\_\_\_

5)  $(15) \times (-1) =$  \_\_\_\_\_

6)  $4 \times 13 =$  \_\_\_\_\_

7)  $(-13) \times 8 =$  \_\_\_\_\_

8)  $(-15) \times (-4) =$  \_\_\_\_\_

9)  $7 \times 14 =$  \_\_\_\_\_

10)  $0 \times (-10) =$  \_\_\_\_\_

11)  $(-5) \times (-8) =$  \_\_\_\_\_

12)  $6 \times 3 =$  \_\_\_\_\_

13)  $(-3) \times 9 =$  \_\_\_\_\_

14)  $11 \times (-8) =$  \_\_\_\_\_

15)  $12 \times (-10) =$  \_\_\_\_\_

16)  $(-7) \times 2 =$  \_\_\_\_\_

27

x	-11	-9
9	-99	-81
-3	33	27

# Multiplication Squares

Sheet 1

Complete the following squares by multiplying the integers.

1)

x	-2	6
-12		
-3		

2)

x	10	1
8		
-5		

3)

x	3	-9
-7		
10		

4)

x	1	12
4		
11		

5)

x	2	-8
-7		
3		

6)

x	-11	-6
5		
9		

7)

x	7	-1
8		
-1		

8)

x	0	-10
6		
2		

9)

x	-4	7
-9		
4		

Name : \_\_\_\_\_

Score : \_\_\_\_\_

## Dividing Integers

Sheet 1

Find the quotient.

1)  $(-28) \div (-7) =$  \_\_\_\_\_

2)  $182 \div 14 =$  \_\_\_\_\_

3)  $120 \div (-8) =$  \_\_\_\_\_

4)  $(-45) \div 5 =$  \_\_\_\_\_

5)  $72 \div 12 =$  \_\_\_\_\_

6)  $(-108) \div (-9) =$  \_\_\_\_\_

7)  $(-66) \div 6 =$  \_\_\_\_\_

8)  $55 \div (-11) =$  \_\_\_\_\_

9)  $(-150) \div (-15) =$  \_\_\_\_\_

10)  $(-3) \div 3 =$  \_\_\_\_\_

11)  $20 \div (-10) =$  \_\_\_\_\_

12)  $112 \div 8 =$  \_\_\_\_\_

13)  $(-16) \div 2 =$  \_\_\_\_\_

14)  $(-12) \div (-4) =$  \_\_\_\_\_

15)  $91 \div 13 =$

16)  $24 \div (-6) =$

Name: \_\_\_\_\_

Date: \_\_\_\_\_

# Integer Multiplication Chart

X	-5	-4	-3	-2	-1	0	1	2	3	4	5
5	-25	-20	-15	-10	-5	0	5	10	15	20	25
4	-20	-16	-12	-8	-4	0	4	8	12	16	20
3	-15	-12	-9	-6	-3	0	3	6	9	12	15
2	-10	-8	-6	-4	-2	0	2	4	6	8	10
1	-5	-4	-3	-2	-1	0	1	2	3	4	5
0	0	0	0	0	0	0	0	0	0	0	0
-1	5	4	3	2	1	0	-1	-2	-3	-4	-5
-2	10	8	6	4	2	0	-2	-4	-6	-8	-10
-3	15	12	9	6	3	0	-3	-6	-9	-12	-15
-4	20	16	12	8	4	0	-4	-8	-12	-16	-20
-5	25	20	15	10	5	0	-5	-10	-15	-20	-25

**Missing Integers**

Sheet 1

Fill in the missing integer(s).

1) \_\_\_\_\_  $\div$  -12 = 6

2) 3  $\times$  \_\_\_\_\_ = -18

3) -2  $\times$  \_\_\_\_\_ = -10

4) \_\_\_\_\_  $\div$  7 = 15

5) 121  $\div$  \_\_\_\_\_ = -11

6) \_\_\_\_\_  $\times$  -2 = 30

7) \_\_\_\_\_  $\times$  -1 = 9

8) 48  $\div$  \_\_\_\_\_ = -12

9) \_\_\_\_\_  $\div$  10 = 14

10) -5  $\times$  \_\_\_\_\_ = -75

11) 7  $\times$  \_\_\_\_\_ = -91

12) \_\_\_\_\_  $\div$  -10 = 3

13) \_\_\_\_\_  $\div$  8 = -7

14) 12  $\times$  \_\_\_\_\_ = 108

15) 6  $\times$  \_\_\_\_\_ = 24

16) \_\_\_\_\_  $\div$  14 = -2



## Practice 1-9 Multiplying and Dividing Integers

Use repeated addition, patterns, or rules to find each product or quotient.

1.  $23 \cdot 16$

\_\_\_\_\_

2.  $8 \cdot 7(-6)$

\_\_\_\_\_

3.  $-17 \cdot 3$

\_\_\_\_\_

4.  $-24 \div 4$

\_\_\_\_\_

5.  $-65 \div 5$

\_\_\_\_\_

6.  $117 \div (-1)$

\_\_\_\_\_

7.  $-30 \div (-6)$

\_\_\_\_\_

8.  $-21 \div (-3)$

\_\_\_\_\_

9.  $63 \div (-21)$

\_\_\_\_\_

10.  $5(-1)(-9)$

\_\_\_\_\_

11.  $-6(-3) \cdot 2$

\_\_\_\_\_

12.  $-3 \cdot 7(-2)$

\_\_\_\_\_

13.  $\frac{1,512}{-42}$

\_\_\_\_\_

14.  $\frac{-4,875}{-65}$

\_\_\_\_\_

15.  $\frac{-15(-3)}{-9}$

\_\_\_\_\_

Compare. Use  $>$ ,  $<$ , or  $=$  to complete each statement.

16.  $-7(5) \square -6 \cdot (-6)$

17.  $-20 \cdot (-5) \square 10 \cdot |-10|$

18.  $3(-6) \square -3(6)$

19.  $121 \div (-11) \square -45 \div (-6)$

20.  $-40 \div 8 \square 40 \div (-8)$

21.  $-54 \div 9 \square 21 \div (-3)$

For each group, find the average.

22. temperatures:  $6^\circ, -15^\circ, -24^\circ, 3^\circ, -25^\circ$  \_\_\_\_\_

23. bank balances:  $\$52, -\$7, \$20, -\$63, -\$82$  \_\_\_\_\_

24. stock price changes:  $\$6, -\$6, -\$9, \$1, \$3$  \_\_\_\_\_

25. golf scores:  $-2, 0, 3, -2, -3, 1, -4$  \_\_\_\_\_

26. elevations (ft):  $-120, 168, -60, -42, -36$  \_\_\_\_\_

Write a multiplication or division sentence to answer the question.

27. The temperature dropped  $4^\circ$  each hour for 3 hours. What was the total change in temperature?
- \_\_\_\_\_

# Why Did Zelda Name Her Pet Fawn "Ninety-nine Cents"?

Do each exercise below and find your answer in the Code Key. Notice the letter above it. Print this letter in the box at the bottom of the page that contains the number of the exercise.

CODE KEY																
K	Q	G	B	T	L	N	A	I	C	D	H	O	U	E	W	S
-68	-19	-17	-12	-10	-8	-7	-6	-5	-3	-1	0	2	4	9	12	20

①  $\frac{-20}{4} =$

②  $\frac{20}{-2} =$

③  $\frac{-60}{-5} =$

④  $\frac{24}{-4} =$

⑤  $\frac{-100}{-5} =$

⑥  $\frac{-56}{8} =$

⑦  $\frac{150}{-15} =$

⑧  $-38 \div 2 =$

⑨  $-80 \div (-20) =$

⑩  $35 \div (-7) =$

⑪  $-1000 \div 100 =$

⑫  $-36 \div (-4) =$

⑬  $\frac{-9+5}{-2} =$

⑭  $\frac{-20+(-20)}{5} =$

⑮  $\frac{-7+20}{-13} =$

⑯  $\frac{-30+3}{-3} =$

⑰  $\frac{-24}{6} + \frac{-21}{7} =$

⑱  $\frac{15}{-3} + \frac{-14}{-2} =$

⑲  $\frac{60}{4} + \frac{-44}{4} =$

⑳  $\frac{-45}{3} + \frac{2}{-1} =$

㉑  $\frac{-430}{-10} + \frac{-430}{10} =$

㉒  $\frac{-84}{7} + \frac{34}{17} =$

㉓  $\frac{75}{-15} + \frac{-28}{-4} =$

㉔  $\frac{-4 \cdot 6}{2} =$

㉕  $\frac{(-6)^2}{4} =$

㉖  $\frac{-3(4)}{6} + \frac{-2(10)}{5} =$

㉗  $\frac{(-2)(3)(-16)}{-8} =$

㉘  $\frac{(5)(2) + (-6)(3)}{-2} =$

㉙  $\frac{(-2)(7) + (-1)(-5)}{3} =$

㉚  $\frac{-680}{10} =$

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

# All Operations with Integers (G)

Use an integer strategy to find each answer.

$$(-30) \div (+6) =$$

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

$$(+15) \div (+3) =$$

$$(-6) + (-7) =$$

$$(-7) + (-3) =$$

$$(-4) \times (-3) =$$

$$(-1) - (+1) =$$

$$(-3) + (+4) =$$

$$(+3) + (-7) =$$

$$(-6) \times (+8) =$$

$$(-24) \div (-4) =$$

$$(+6) - (-8) =$$

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

$$(+3) - (+8) =$$

$$(+3) \times (+1) =$$

$$(+21) \div (+7) =$$

$$(-5) - (-1) =$$

$$(+1) \times (+8) =$$

$$(-6) + (-3) =$$

$$(+3) + (-2) =$$

$$(-9) - (+1) =$$

$$(+6) \times (+9) =$$

$$(+10) \div (-2) =$$

$$(+2) - (+8) =$$

$$(+9) \div (+9) =$$

$$(-4) \div (+2) =$$

$$(-3) - (-1) =$$

$$(+9) \times (+4) =$$

$$(+18) \div (+6) =$$

$$(+3) \div (+3) =$$

# What Were the Headlines After the Bad Guy Paid Arty Snerd \$1.00 to Strangle Six Grocery Shoppers?



Do each exercise below and find your answer in one of the boxes at the bottom of the page. Write the letter of the exercise in that box. (To help you locate each answer quickly, the answers are arranged in order from smallest to largest.)

- (S)  $-5(-1+6)$  (Y)  $(-3)^2(-2)^3$  (E)  $(-3)(-12)(-1)$  (W)  $(-7)(5)(-4)$   
 (A)  $\frac{8(-3)}{-6}$  (O)  $\frac{-6+(-3)+(-7)}{4}$  (A)  $\frac{-60}{-3} + \frac{-48}{4}$  (F)  $\frac{-9 \cdot 5}{3}$   
 (I)  $\frac{-380}{38} + \frac{380}{-38}$  (A)  $-5 \cdot 2 \cdot 53$  (R)  $-1(-6) + 8(-2)$  (L)  $(-2)(-3) + (-1)(7)$   
 (E)  $(2)(-2) + (5)(6)$  (R)  $-8 + 17 + (-3)$  (T)  $(-9)^2(-1)^5$  (C)  $(-4)^3$   
 (T)  $\frac{-15}{15} + \frac{150}{15}$  (X)  $\frac{-72}{8} + \frac{-56}{7}$  (R)  $(-8)(-1)(4)(-3)$  (F)  $\frac{(-4)(-25)}{5}$   
 (O)  $(-1)(-7)^2$  (S)  $(-3 \cdot 7) + (-2 \cdot 4)$  (A)  $\frac{9(-4)}{-2}$  (D)  $\frac{-19+(-11)}{6}$   
 (A)  $(-3)(7)(-2)(5)$  (A)  $\frac{170}{-10} + \frac{96}{12}$  (O)  $\frac{-32}{2} + \frac{-75}{-15}$  (K)  $80 + (-50) + (-70)$   
 (S)  $(-2)^4$  (Y)  $(-30)^2$  (L)  $-7 + 8 + (-9) + 10$  (H)  $-2(-5)(-6)$

	-530	-96	-81	-72	-64	-60	-49	-40	-36	-29	-25	-20	-17	-15	-11	-10	
	-9	-5	-4	-1	2	4	6	8	9	16	18	20	26	140	210	900	

# Integer Operations Color by Number

A

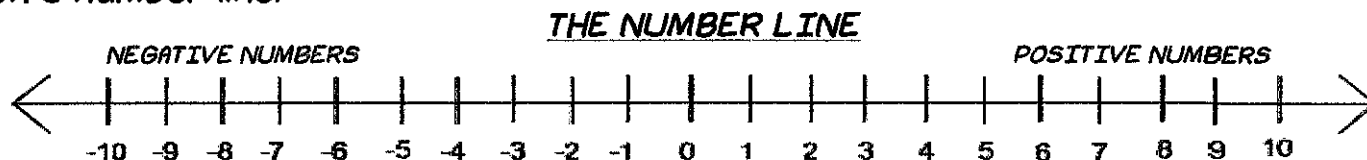
**Directions:** Solve each problem, showing all work. Then find the ANSWER number on the coloring sheet and color it with the color given in the box.

1	$-8 + 3$	2	$7 - (-14)$	3	$(-15)(-4)$	4	$(-48) \div (-4)$	5	$18 + (-30)$
Color this answer purple.	Color this answer yellow.	Color this answer yellow.	Color this answer orange.	Color this answer orange.	Color this answer pink.	Color this answer light green.	Color this answer light green.	Color this answer light green.	Color this answer light green.
6	$20 - (-11)$	7	$(8)(-2)$	8	$(-36) \div (9)$	9	$-5 + 10$	10	$-9 - 2$
Color this answer light blue.	Color this answer dark blue.	Color this answer dark blue.	Color this answer purple.	Color this answer purple.	Color this answer yellow.	Color this answer yellow.	Color this answer yellow.	Color this answer yellow.	Color this answer yellow.
11	$(-4)(-4)$	12	$-32 \div (-8)$	13	$-4 - (-15)$	14	$(3)(6)(-2)$	15	$-11 - 8 + 21$
Color this answer orange.	Color this answer light green.	Color this answer light green.	Color this answer dark blue.	Color this answer dark blue.	Color this answer purple.	Color this answer purple.	Color this answer purple.	Color this answer orange.	Color this answer orange.
16	$(-9)(2)(-2)$	17	$(-20) \div (-4) - 7$	18	$(-3)(-4)(-4)$	19	$-17 - 7$	20	$3 - 24$
Color this answer yellow.	Color this answer dark blue.	Color this answer dark blue.	Color this answer light green.	Color this answer light green.	Color this answer yellow.	Color this answer yellow.	Color this answer purple.	Color this answer purple.	Color this answer purple.



# INTEGER CHEAT SHEET

**Integers**- A set of positive and negative whole numbers. They can be represented on a number line.



**Absolute Value**- The distance a number is from zero on the number line. An absolute value is never negative. Examples:  $|-5| = 5$  and  $|5| = 5$

## ADDING INTEGERS

**SAME SIGN**- Add and Keep the Sign!

Add the absolute value of the numbers and keep the same sign.

(positive) + (positive) = Positive

$$(+4) + (+5) = +9$$

(negative) + (negative) = Negative

$$(-4) + (-5) = -9$$

**DIFFERENT SIGNS**- Subtract and Keep the Sign of the Bigger Number!

Subtract the absolute value of the numbers and keep the sign of the bigger number.

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

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

## SUBTRACTING INTEGERS

Do not subtract integers. You must change the signs:

**"Add the Opposite"**

**KEEP**- Keep the sign of the first number

**CHANGE**- Change the subtraction sign to addition

**CHANGE**- Change the sign of the second number to the opposite sign. If it is positive- change to negative. If it is negative- change to positive.

$$(+4) - (-4)$$

Keep    change    change  
(+4)    +    (+4)

**NOW USE THE RULES FOR ADDING:**

**SAME SIGN**- Add absolute values and keep sign:

$$(+4) + (+4) = 8$$

## MULTPLYING INTEGERS

**SAME SIGNS**- POSITIVE

Multiply the numbers. Answer will be positive.

$$(-5) \times (-5) = +25$$

**DIFFERENT SIGNS**- NEGATIVE

Multiply the numbers. Answer will be negative

$$(+5) \times (-5) = -25$$

## DIVIDING INTEGERS

**SAME SIGNS**- POSITIVE

Divide the numbers. Answer will be positive.

$$(-5) \div (-5) = +1$$

**DIFFERENT SIGNS**- NEGATIVE

Divide the numbers. Answer will be negative

$$(+5) \div (-5) = -1$$

## Reteaching 1-2 The Order of Operations

Simplify  $\frac{18+4}{2} - 3(10 \cdot 2 - 3 \cdot 6)$

$$\frac{18+4}{2} - 3(10 \cdot 2 - 3 \cdot 6)$$

$$= \frac{22}{2} - 3(10 \cdot 2 - 3 \cdot 6)$$

$$= 11 - 3(20 - 18)$$

$$= 11 - 3(2)$$

$$= 11 - 6$$

$$= 5$$

Work inside grouping symbols first.

A fraction bar is a grouping symbol.

Divide the fraction.

Multiply within the parentheses.

Subtract within the parentheses.

Multiply.

Subtract.

Simplify each expression.

1.  $8 + 2 \times 7$   
\_\_\_\_\_

3.  $\frac{8+12}{5}$   
\_\_\_\_\_

5.  $3 + 2 \cdot 5 - 4$   
\_\_\_\_\_

7.  $9 \cdot 3 + 2 \cdot 5$   
\_\_\_\_\_

9.  $5(2 + 4) + 15 \div (9 - 6)$   
\_\_\_\_\_

11.  $(18 + 7) \div (3 + 2)$   
\_\_\_\_\_

13.  $4 \cdot 9 + 8 \div 2 - 6 \cdot 5$   
\_\_\_\_\_

15.  $53 - [3(8 + 2) + 5(9 - 5)]$   
\_\_\_\_\_

17.  $2[9(6 - 5)]$   
\_\_\_\_\_

2.  $16 \div 2 - 5$   
\_\_\_\_\_

4.  $4 - 24 \div 8$   
\_\_\_\_\_

6.  $15 - 2(5 - 2)$   
\_\_\_\_\_

8.  $12 \div 4 - 6 \div 3$   
\_\_\_\_\_

10.  $3 \cdot 2 + 16 \div 4 - 3$   
\_\_\_\_\_

12.  $3[8 - 3 \cdot 2 + 4(5 - 2)]$   
\_\_\_\_\_

14.  $[7 + 3 \cdot 2 + 8] \div 7$   
\_\_\_\_\_





16.  $(20 + 22) \div 6 + 1$   
\_\_\_\_\_

18.  $5 + 3 \cdot 4 - 8 + 2 \cdot 7$   
\_\_\_\_\_



**Integers - MCQ**

Sheet 1

- 1) Which integer is greater than  $-5$ ?
- a)  $-7$                       b)  $-1$                       c)  $-9$                       d)  $-11$
- 2) How many integers are there between  $-8$  and  $2$ ?
- a)  $7$                       b)  $4$                       c)  $0$                       d)  $9$
- 3) What is the opposite value of the integer  $6$ ?
- a)  $-6$                       b)  $5$                       c)  $6$                       d)  $-4$
- 4) Identify the integer that is less than  $-3$ .
- a)  $0$                       b)  $-1$                       c)  $-4$                       d)  $2$
- 5) Which of the following integers is greater than  $-1$  and lesser than  $7$ ?
- a)  $-9$                       b)  $5$                       c)  $-5$                       d)  $8$
- 6) How many pairs of opposite integers are there between  $-4$  and  $5$ ?
- a)  $3$                       b)  $8$                       c)  $2$                       d)  $6$
- 7) The following data shows the changes in temperatures across various cities from morning to noon. Which city recorded the maximum temperature?
- a)   $20^{\circ}\text{C}$   
Atlanta
- b)   $13^{\circ}\text{C}$   
Chicago
- c)   $12^{\circ}\text{C}$   
Raleigh
- d)   $25^{\circ}\text{C}$   
Manfred

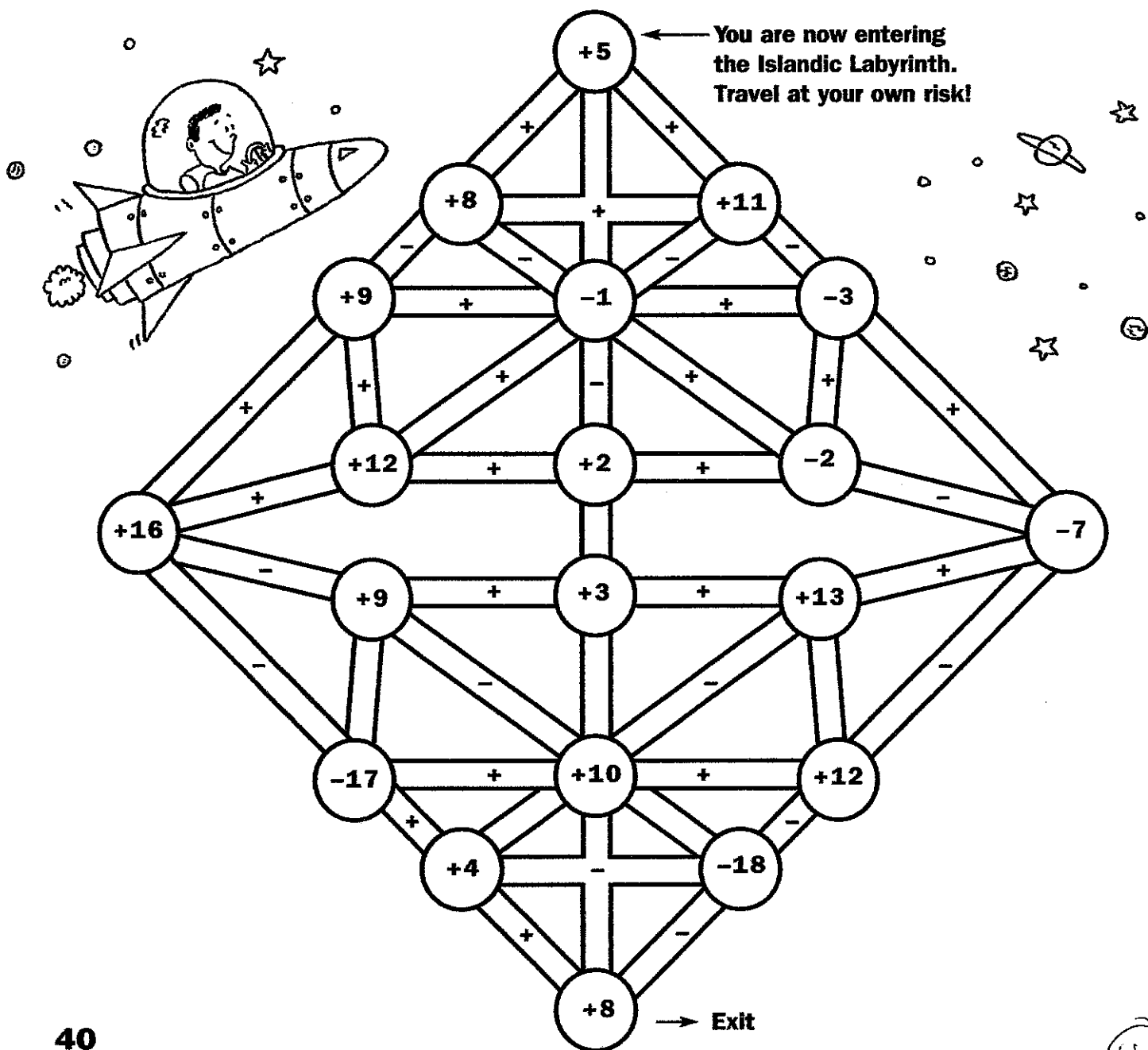
Name \_\_\_\_\_ Date \_\_\_\_\_

## Galactic Math

Find your way through the Islandic Labyrinth. Begin your journey at the top. Move along the paths from one circle to the next, performing the operation indicated. For instance:

$$\begin{array}{c} \textcircled{+7} \\ \text{---} \\ \textcircled{-5} \end{array} = 12 \qquad \begin{array}{c} \textcircled{-8} \\ \text{---} \\ \textcircled{+3} \end{array} = -5$$

Tally your score as you go. You may never retrace your path or cross over it. When you get to the exit, if your score is 19, you may exit. If not, try again.



(41)

# All Operations with Integers (A)

Use an integer strategy to find each answer.

$$(-5) + (-4) =$$

$$(-4) \times (-7) =$$

$$(+6) - (-2) =$$

$$(-3) + (+1) =$$

$$(-18) \div (-6) =$$

$$(-1) \times (+5) =$$

$$(-2) \times (-7) =$$

$$(+8) \times (+3) =$$

$$(+9) + (-3) =$$

$$(+3) \times (-1) =$$

$$(-4) - (-1) =$$

$$(+6) + (-5) =$$

$$(-3) + (+9) =$$

$$(-5) \times (+3) =$$

$$(-3) \div (+3) =$$

$$(-3) \times (+3) =$$

$$(-3) + (-6) =$$

$$(+8) + (-9) =$$

$$(-5) \times (+5) =$$

$$(-8) - (+6) =$$

$$(-7) - (-3) =$$

$$(+1) - (-9) =$$

$$(+8) \times (+4) =$$

$$(-4) + (-5) =$$

$$(+8) - (-2) =$$

$$(-9) + (-4) =$$

$$(+6) \times (+3) =$$

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

$$(+2) \times (-4) =$$

$$(+3) + (-8) =$$

# All Operations with Integers (B)

Use an integer strategy to find each answer.

$(+9) - (+7) =$

$(+3) + (+4) =$

$(+30) \div (+6) =$

$(-5) \times (+8) =$

$(+4) + (+7) =$

$(+8) - (-1) =$

$(+6) \times (+4) =$

$(-7) - (+6) =$

$(-3) - (-6) =$

$(+3) + (-4) =$

$(+1) \times (-2) =$

$(+30) \div (-5) =$

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

$(+6) + (-8) =$

$(-3) + (+3) =$

$(-2) - (-7) =$

$(-2) - (+1) =$

$(+1) \div (+1) =$

$(-5) - (+4) =$

$(+8) \div (+2) =$

$(-5) + (-6) =$

$(-1) + (+2) =$

$(-8) \times (-6) =$

$(-64) \div (+8) =$

$(+8) + (+5) =$

$(-9) \times (-8) =$

$(+2) + (+5) =$

$(-42) \div (-6) =$

$(-7) \times (-8) =$

$(+40) \div (-5) =$

# What Happened to the Dallas Sheep Rancher Who Claimed He Was Going to Start Selling Wool in 47 Different Colors?



Do each exercise below and find your answer in one of the boxes at the bottom of the page. Write the letter of the exercise in that box. (To help you locate your answer quickly, the answers are arranged in order from smallest to largest.)



- (E)  $-8 - 3 =$
- (A)  $4 - (-1) =$
- (H)  $2 - 11 =$
- (T)  $-12 - (-14) =$
- (E)  $30 + (-8) =$
- (B)  $3 - (-6) =$
- (A)  $-11 - 7 =$
- (I)  $20 - 25 =$
- (E)  $-36 - (-6) =$
- (N)  $13 - (-4) =$
- (R)  $-3 + 16 =$

- (E)  $-5 - 16 =$
- (A)  $30 + (3 - 5) =$
- (D)  $2 - (1 - 9) =$
- (S)  $(-22 + 33) - 11 =$
- (E)  $-10 - (8 - 10) =$
- (I)  $(6 - 1) - (-12 + 2) =$
- (H)  $(-15 - 15) - (15 - 13) =$
- (E)  $(3 - 7) - (9 - 12) =$
- (S)  $(-25 + 50) - (-4 - 6) =$
- (T)  $-2 - 5 - 3 =$
- (B)  $-18 + 14 - 2 =$
- (M)  $5 - 12 - 7 =$
- (E)  $100 - 97 + 9 =$
- (G)  $10 - 4 - 4 - 4 =$
- (B)  $-36 - 12 + 36 - 12 =$
- (T)  $-3 + 40 - 10 - 8 =$
- (G)  $-16 + 9 - 2 + 6 =$
- (C)  $-5 - 5 - 5 - 5 =$
- (X)  $(-3 - 12) - (-40) =$
- (L)  $2 - (32 - 34) =$
- (M)  $10 + (-6 - 1 + 4) =$
- (Y)  $(-3 + 8 - 5) - (-11) =$

-32	-30	-24	-21	-20	-18	-14	-11	-10	-9	-8	-6	-5	-3	-2	-1	0	2
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4	5	7	9	10	11	12	13	15	17	19	22	25	28	35
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# Why Did the Snail Have an "S" Painted on His VW?

Do each exercise below and find your answer in the corresponding set of answer boxes. Print the letter of that exercise in the box containing the answer.

- Y  $(-4)(3)$
- E  $(-5)(-8)$
- O  $-9 \cdot 7$
- R  $-12(-4)$
- C  $16(-3)$

- E  $(-10)(4)$
- S  $-12(-1)$
- E  $(8)(-8)$
- N  $(-5)20$
- V  $(-50)(-2)$

- L  $-3 \cdot 4 \cdot 2$
- O  $(-3)(-4)(2)$
- U  $5(-1)(12)$
- D  $5(-1)(-12)$
- U  $(-3)(-3)(-3)$

- O  $(-4)(-5)(-6)$
- W  $(-9)(4)(-10)$
- S  $(5)(3)(-11)$
- T  $(-15)(-2)4$
- H  $(-90)(-90)(0)$

12	-48	-64	100	-40	48	-12	-63	-100	40	360	24	-27	-24	60	-165	0	-120	-60	120
----	-----	-----	-----	-----	----	-----	-----	------	----	-----	----	-----	-----	----	------	---	------	-----	-----

- E  $(-40)(60)$
- T  $(-80)(-20)$
- O  $2(-360)$
- T  $(-4)(-4)(-4)$
- A  $(8)(-1)(12)$

- H  $(-7)(6)(-2)$
- L  $3(-25)(-2)$
- S  $(-2)(-4)8$
- O  $-4 \cdot 7 \cdot 3$
- K  $(10)(10)(-16)$

- A  $(-5)(3)(-4)(10)$
- O  $(6)(-2)(-10)(-5)$
- R  $(3)(3)(-4)(20)$
- C  $(-5)(-40)(-4)(-1)$
- G  $(-80)(3)(-1)(3)$



150	-84	-720	-1600	-96	1600	-64	84	-2400	64	800	600	-720	720	-600
-----	-----	------	-------	-----	------	-----	----	-------	----	-----	-----	------	-----	------

Name : \_\_\_\_\_

Score : \_\_\_\_\_

## Integers - True or False?

Sheet 1

Read the statements below and label them true or false.

- 1) The product of two negative integers is positive. \_\_\_\_\_
- 2) The additive inverse of a positive integer is positive. \_\_\_\_\_
- 3) Zero is a neutral integer. It can be either positive or negative. \_\_\_\_\_
- 4) Two integers that are at an equal distance from zero on either side of the number line are called opposites. \_\_\_\_\_
- 5) Whole numbers are integers that can be positive, negative and zero.  
\_\_\_\_\_
- 6) In a number line, all positive integers lie to the right of zero and all negative integers lie to the left of zero. \_\_\_\_\_
- 7) When a negative integer is added to a positive integer, we either get a positive or negative integer. \_\_\_\_\_
- 8) Zero is greater than every positive integer. \_\_\_\_\_
- 9) Negative integers are always greater than positive integers. \_\_\_\_\_
- 10) Opposite integers have the same absolute value. \_\_\_\_\_