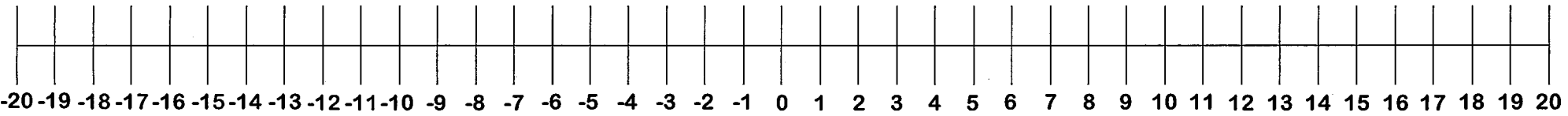
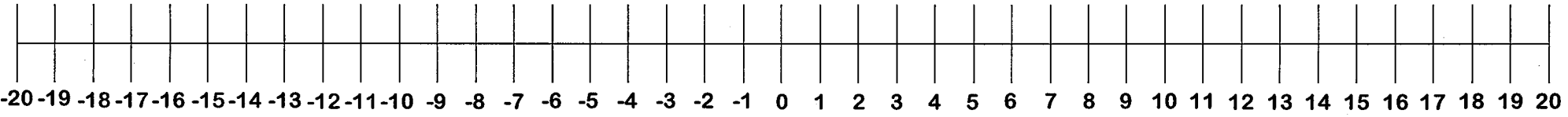
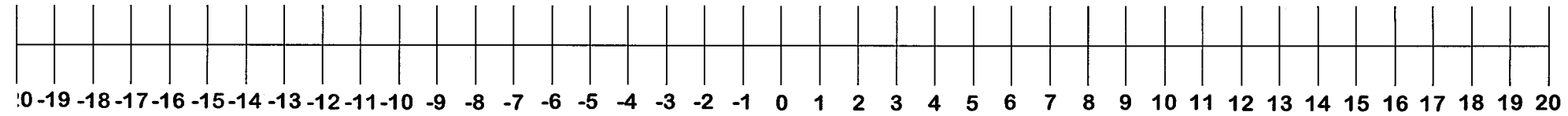
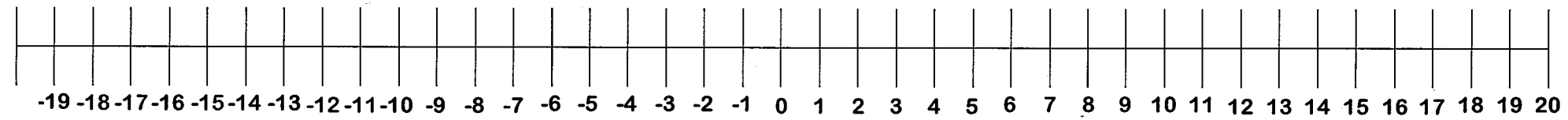
Multiplication Chart
1-15 Times Tables

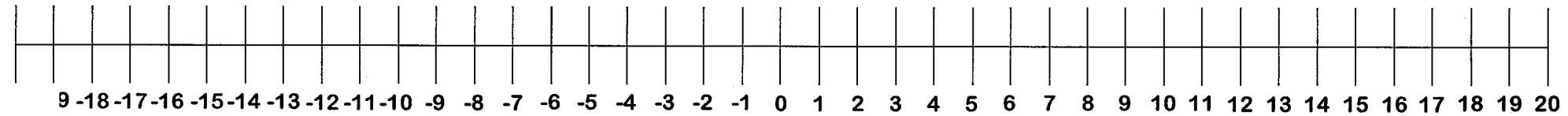
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30
3	3	6	9	12	15	18	21	24	27	30	33	36	39	42	45
4	4	8	12	16	20	24	28	32	36	40	44	48	52	56	60
5	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75
6	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90
7	7	14	21	28	35	42	49	56	63	70	77	84	91	98	105
8	8	16	24	32	40	48	56	64	72	80	88	96	104	112	120
9	9	18	27	36	45	54	63	72	81	90	99	108	117	126	135
10	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150
11	11	22	33	44	55	66	77	88	99	110	121	132	143	154	165
12	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180
13	13	26	39	52	65	78	91	104	117	130	143	156	169	182	195
14	14	28	42	56	70	84	98	112	126	140	154	168	182	196	210
15	15	30	45	60	75	90	105	120	135	150	165	180	195	210	225


-20 -19 -18 -17 -16 -15 -14 -13 -12 -11 -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20


-20 -19 -18 -17 -16 -15 -14 -13 -12 -11 -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

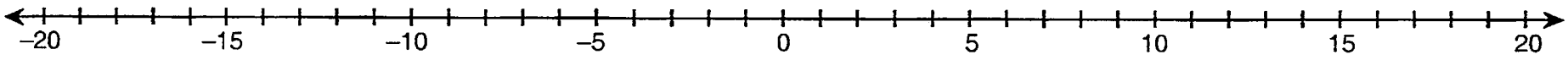

0 -19 -18 -17 -16 -15 -14 -13 -12 -11 -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20


-19 -18 -17 -16 -15 -14 -13 -12 -11 -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20


9 -18 -17 -16 -15 -14 -13 -12 -11 -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

Why Do Flies Always Bring Their Stopwatches to Parties?

Write an integer for each exercise. Find the point on the number line that corresponds to the integer. Write the letter of the exercise above the number line at that point.



Write an integer for each situation.

- (E) 3 units to the left of 0
- (S) the opposite of 8
- (N) 15 ft above sea level
- (E) a gain of 6 yd
- (I) 5° below zero
- (N) a deposit of $20
- (E) 14 steps backward
- (T) four seconds after liftoff
- (I) a loss of ten pounds
- (W) one floor down
- (E) 19 m below sea level
- (H) the opposite of –11

Write an integer for each expression.

- (A) $-(17)$
- (I) $-(-14)$
- (E) $|-1|$
- (R) $|8|$
- (U) $-n$ if $n = 16$
- (G) $-n$ if $n = -16$
- (B) $-(12 + 8)$
- (H) $|16 - 11|$
- (E) $-|9|$
- (S) $-|-15|$
- (A) $|x|$ if $x = -12$
- (F) $-|x|$ if $x = -12$

Write an integer for each question.

- (N) Which is greater, 2 or –13?
- (T) Which is greater, –7 or –6?
- (E) Which is greater, –11 or 9?
- (C) Which is less, –18 or –4?
- (U) Which is less, $|-20|$ or 19?
- (H) Which is less, 0 or $-(-3)$?

The table below gives the starting point, direction, and length of arrows drawn on the number line. Complete the table by writing the endpoint of each arrow.

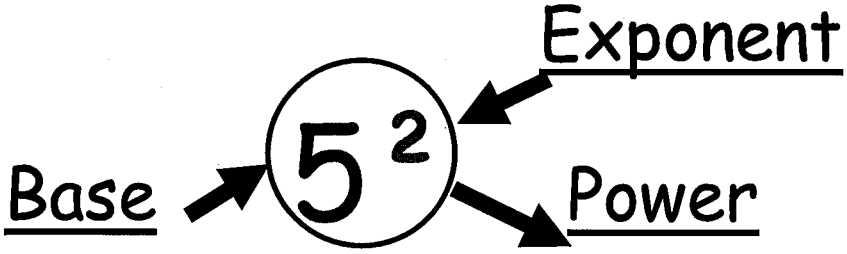
Starting Point	Direction, Length	Endpoint
0	negative, 4	(M)
–2	positive, 9	(Y)
–2	negative, 9	(L)
5	positive 13	(F)
–10	positive, 23	(V)

Name: _____

Repeated Multiplication:
(Exponents)

You can write ***repeated multiplication*** using exponents.

Part I: Identify the following parts of the power:



1. A power is a way of writing repeated multiplication.
2. The base of a power is the factor.
3. The exponent is the number of times the base is to be used as a factor

Exponential expressions can be represented in the following ways:

Expanded form	***Exponential form:***
2x2x2	2^3
Standard form (solved/answer) *8*	***Word Form:*** • **Two to the third power** • **Two cubed**

Evaluating Algebraic Expressions (A)

Instructions: Evaluate each algebraic expression with the given values.

$m + 5q$; where $m = 1$, and $q = 5$

$(y - x)^3$; where $x = 1$, and $y = 3$

$q(p + 2)$; where $p = 4$, and $q = 3$

$y + y - x$; where $x = 6$, and $y = 5$

$(z + y) \div 6$; where $y = 6$, and $z = 6$

$h(j - h)$; where $h = 3$, and $j = 6$

$x + y + y$; where $x = 5$, and $y = 2$

$z^2 - y$; where $y = 4$, and $z = 3$

$b(4 + a)$; where $a = 6$, and $b = 2$

$m - n + m$; where $m = 5$, and $n = 1$

$(h + j) \div 6$; where $h = 2$, and $j = 4$

Evaluate Expressions

Name: _____ Score: _____

Evaluate the following expressions. Use the table to find your answers.

a	b	c	m	n	t	u	x	y	z
3	5	8	10	14	20	25	-2	-5	0.5

$3(4 + 9x)$	$-3(2n + 3)$	$-2(4 + 3t)$
-42		
$-2(-4m - 8)$	$5(y + 3)$	$-6(-2 - 2c)$
$2(3t - 5)$	$-4(a - 4)$	$-3(b - 2)$
$3(-1 - 4n)$	$-3(9u + 5)$	$9(z + 4)$
$3(-5 - 2t)$	$-3(3 + 6x)$	$(-8 + u)6$
$-(5 - 2c)$	$(-z + 4)2$	$2(3 + 4y)$
$2(4 + 3y)$	$5(2x + 0)$	$5(-2t - 6)$

6

Why Are Mr. and Mrs. Number So Happy?

Write an algebraic expression for each phrase. Write the letter of the exercise in the box that contains the number of the answer.

Let n represent an unknown number.

- O: 8 more than 3 times the number
- E: 9 less than twice the number
- I: 8 minus the product of 9 and the number
- A: The sum of 9 and twice the number
- G: The difference of 8 and twice the number
- T: The quotient of 3 times the number and 8
- E: One-third of twice the number

26: $8 - 9n$	8: $2n - 9$	24: $3n + 9$
10: $8 - 2n$	19: $9 + 2n$	17: $3n + 8$
31: $\frac{3n}{2}$	30: $\frac{2n}{3}$	1: $\frac{3n}{8}$

Let a represent Zog's age now.

- E: Zog's age in nine years
- L: Zog's age four years ago
- T: 9 times the sum of Zog's age and 4 years
- A: Three times Zog's age in two years
- E: 2 years more than 3 times Zog's age
- Y: Nine times Zog's age four years ago
- G: Four years less than 9 times Zog's age

6: $3(a + 2)$	14: $9a - 4$	25: $a - 4$
4: $9(a - 4)$	16: $9(a + 4)$	22: $9a + 2$
9: $4a + 9$	3: $a + 9$	34: $3a + 2$

Let w represent the width of a rectangle. The length is 7 cm more than the width.

- I: Four times the length
- A: 7 cm more than four times the width
- H: One-fourth of the length
- O: 7 cm less than twice the width
- E: 7 times the sum of the width and 4 cm
- N: Twice the width plus twice the length
- T: The product of the width and the length

5: $4w - 2$	12: $4(w + 7)$	13: $2w + 2(w + 7)$
21: $7(w + 4)$	28: $w(w + 7)$	32: $2w - 7$
2: $\frac{w + 7}{4}$	23: $4w + 7$	15: $\frac{w + 4}{2}$

Let p represent the price of a CD. A tape costs \$5 less than a CD.

- V: The price of a CD increased by \$6
- O: The price of six tapes
- L: \$5 less than the price of six CD's
- H: Half the price of a tape
- R: The price of five CD's and two tapes
- T: The price of two CD's and five tapes
- N: \$6 less than the price of a tape

29: $6p - 5$	20: $p + 6$	27: $2p + 5(p - 5)$
24: $5p - 6$	31: $2p + 5p$	33: $(p - 5) - 6$
11: $6(p - 5)$	18: $\frac{p - 5}{2}$	7: $5p + 2(p - 5)$

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

NOTES

SOLVE:

EX) $\frac{m}{4} + 3 = 9$

$\frac{m}{4} + 3 = 9$ copy

$-3 \quad -3$ inverse

(4) $\frac{m}{4} = 6$ (4) Bring down

$m = 24$ solution

CHECK: (PEMDAS)

$\frac{m}{4} + 3 = 9$ Original

$\frac{24}{4} + 3 = 9$ Substitute

$6 + 3 = 9$ solve

$9 = 9$ T or F

3) $\frac{z}{5} - 15 = -65$

SOLVE:

CHECK: (PEMDAS)

4) $6 + \frac{p}{8} = 13$

SOLVE:

CHECK: (PEMDAS)

Did You Hear About . . .

1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16 ?

Solve each equation or problem and find your solution in the answer column. Write the word next to the answer in the box containing the problem number.

1 $5n + 4 = -26$

2 $-2a - 9 = 39$

3 $\frac{x}{4} - 1 = 7$

4 $\frac{m}{-5} + 13 = 20$

5 $-7y + 2 = -75$

6 $\frac{v}{3} - 10 = -14$

7 $-3 + 4p = -31$

8 $-\frac{w}{6} + 9 = 2$

9 $8 - 3x = 128$

10 $20 - \frac{k}{15} = 17$

11 $45 = 6d - 45$

12 $12 = \frac{n}{9} + 1$

13 Five more than twice a number is −13. Find the number.

14 Twelve less than the quotient of a number and 7 is −2. Find the number.

15 The sum of eight times a number and fifteen is seven. Find the number.

16 One fourth of a number, decreased by 10, is −50. Find the number.

−9 • MARKET
42 • HE
−31 • UP
−12 • FEATHERS
−1 • GOING
−100 • PILLOWS
−6 • THE
45 • THAT
−7 • BECAUSE
−3 • DUCK
70 • WAS
32 • WHO
99 • STOCK
85 • SOFT
−35 • INVESTED
−40 • HEARD
−160 • DOWN
−24 • GUY
64 • HAD
15 • THE
11 • IN

Properties of Inequality Handout

NOTES

Inequality Symbols :

$>$ **Greater Than**

$\geq$ **Greater Than or Equal To**

(The line underneath the Greater Than sign indicates also Equal To.)

$<$ **Less Than**

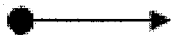
$\leq$ **Less Than or Equal To**

(The line underneath the Less Than sign indicates also Equal To.)

Graphing Inequality Symbols :

Greater Than

(The open circle indicates that this is **NOT EQUAL TO** the number that is graphed.)

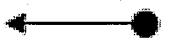


Greater Than or Equal To

(The closed circle indicates that this is **EQUAL TO** the number that is graphed.)

Less Than

(The open circle indicates that this is **NOT EQUAL TO** the number that is graphed.)



Less Than or Equal To

(The closed circle indicates that this is **EQUAL TO** the number that is graphed.)

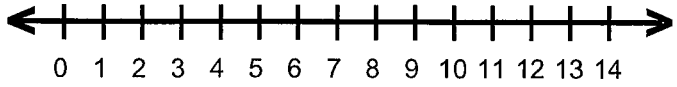
10

Name : _____ Score : _____

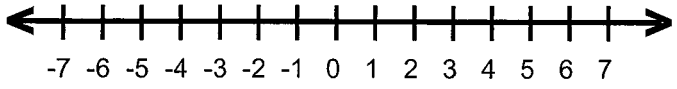
Teacher : _____ Date : _____

Graphing Inequalities

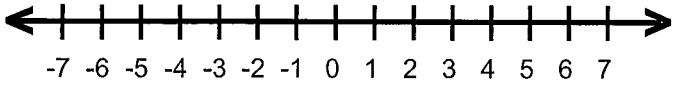
1) $9 \leq b$



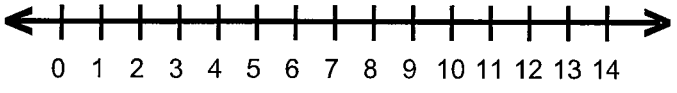
2) $-3 \leq k$



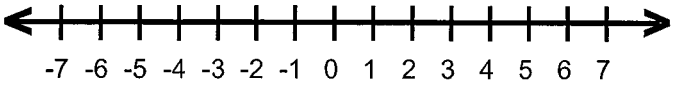
3) $c < 5$



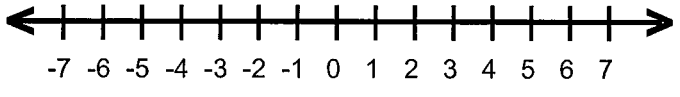
4) $2 \geq b$



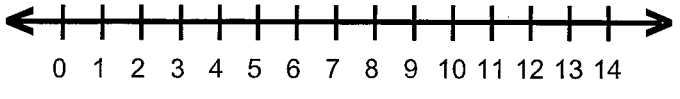
5) $-k > -1$



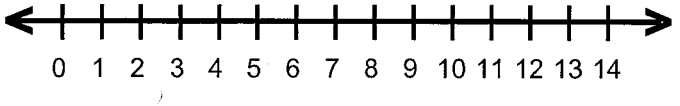
6) $g \geq -6$



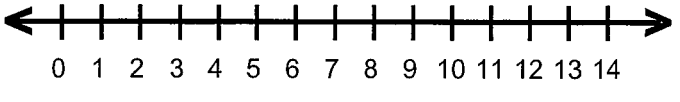
7) $c > 8$



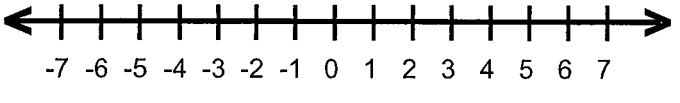
8) $n \leq 4$



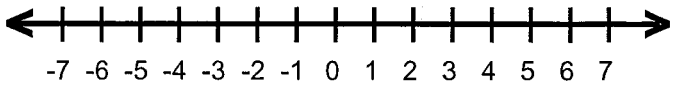
9) $8 < y$



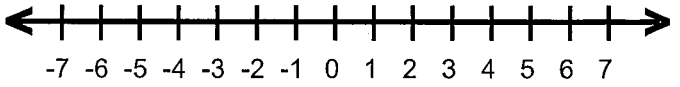
10) $4 \leq m$



11) $-3 < z$

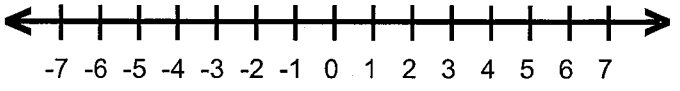


12) $-n \leq 2$

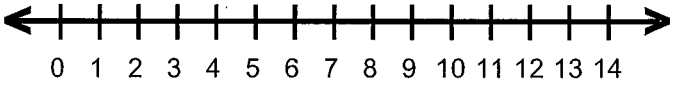


13) $-k > -4$

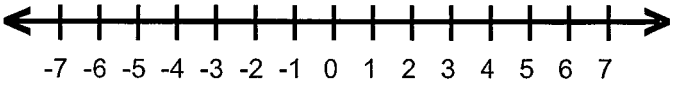
14) $-1 > f$



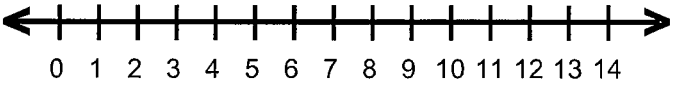
15) $4 < n$



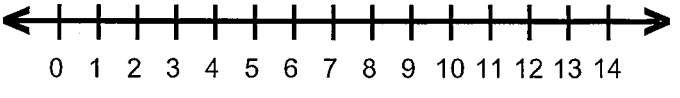
16) $3 > -k$



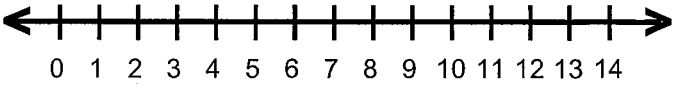
17) $9 \geq g$



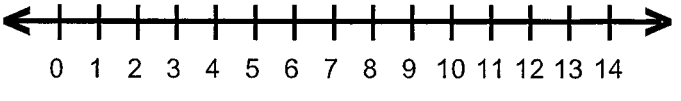
18) $v \geq 4$



19) $c \geq 13$



20) $c < 8$



TEAM NAME:_____ PARTNER B:_____

What Did the Skeleton Order With His Dinner?

Solve each inequality, then mark the letter of the correct answer. Partner #1 will get a lower case letter. Partner #2 will get an upper case letter. In each box containing the lower case letter from Partner #1, write the upper case letter from Partner #2.

1. $-2x + 7 < 11$

2. $\frac{x}{4} - 9 \geq -10$

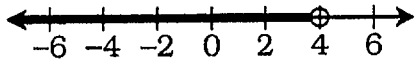
3. $-18 \geq 5x - 8$

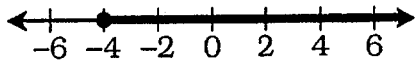
4. $-\frac{1}{2}x + 5 > 3$

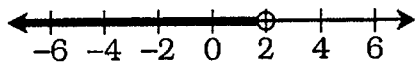
5. $22 \leq -6n + 1$

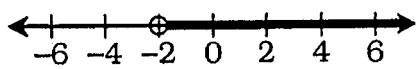
6. $-\frac{n}{15} - 4 \geq -4$

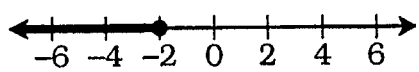
Answers for Exercises 1-4

N.


D.


G.


A.


O.


7. Tonka weighs 150 lb. He is loading a freight elevator with identical 67-pound boxes. The elevator can carry no more than 2000 lb. If Tonka rides up with the boxes, how many boxes can be loaded on the elevator?

8. $0.8y + 30 > -24$

9. $10 < -\frac{1}{7}y - 2$

Answers for 5-7

D. $n \leq 0$

V. $n \geq 0$

A. $n \leq -3.5$

R. 29 or less

I. 27 or less

Answers for 8-10

A. $y > -67.5$

N. $y < -84$

E. $y > -84$

L. > $14,800

P. > $15,600

10. Suppose you are a salesperson for the Acme Dynamite Company. Each month you earn $400 plus one sixth of your sales. What amount must you sell this month to earn more than $3000?

11. $65 \leq -20w - 11$

12. $9 - \frac{w}{10} \geq 2$

Answers for 11-13

T. $w \geq 70$

R. $w \leq 70$

K. $w \leq -3.8$

M. 17 or less

S. 18 or less

13. The Micron Middle School Spring Carnival charges $7 for admission plus $0.75 for each ride ticket. How many ride tickets can you buy if you want to spend no more than $20?

a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q

Why Did Karjam Get a Flat Tire?

Write the letter of each correct answer in the box containing the number of the exercise. If the answer has a ●, shade in the box instead of writing a letter.

Write each fraction as a decimal.

(1) $\frac{3}{10}$ (2) $\frac{7}{10}$ (3) $\frac{1}{2}$ (4) $\frac{1}{5}$ (5) $2\frac{3}{5}$ (6) $2\frac{1}{10}$

Answers

(S) 0.2 (L) 0.4 ● 2.1
(N) 2.2 (O) 2.6 (A) 0.7
(R) 0.3 (E) 0.5 (V) 0.8

Write each decimal as a lowest-terms fraction or mixed number.

(7) 0.7 (8) 0.4 (9) 3.5 (10) 8.2 (11) 8.9 (12) 3.8

Answers

(P) $8\frac{2}{5}$ (A) $\frac{7}{10}$ (I) $3\frac{4}{5}$
(E) $3\frac{1}{2}$ (Y) $\frac{3}{10}$ ● $8\frac{1}{5}$
(G) $3\frac{3}{5}$ (H) $8\frac{9}{10}$ (T) $\frac{2}{5}$

Write each fraction as a decimal.

(13) $\frac{43}{100}$ (14) $\frac{7}{100}$ (15) $\frac{1}{4}$ (16) $\frac{9}{25}$ (17) $\frac{13}{50}$ (18) $\frac{17}{20}$ (19) $5\frac{16}{25}$ (20) $5\frac{3}{4}$

Answers

(R) 0.36 (H) 5.75 ● 0.85
(C) 5.36 (M) 0.65 (N) 0.25
(O) 0.43 (A) 0.26 (K) 0.44
(T) 5.64 ● 0.07 (B) 5.72

Write each decimal as a lowest-terms fraction or mixed number.

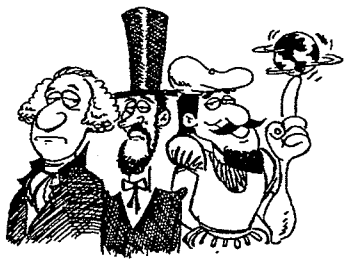
(21) 0.67 (22) 0.09 (23) 0.25 (24) 0.62 (25) 4.35 (26) 9.75 (27) 4.48 (28) 9.06

Answers

(U) $9\frac{43}{50}$ (R) $4\frac{12}{25}$ (P) $\frac{14}{25}$
● $\frac{31}{50}$ ● $\frac{67}{100}$ (F) $9\frac{3}{4}$
(L) $\frac{3}{10}$ (D) $\frac{1}{4}$ (A) $4\frac{11}{20}$
(W) $4\frac{7}{20}$ (K) $9\frac{3}{50}$ (E) $\frac{9}{100}$

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

What Did George Washington, Abraham Lincoln, and Christopher Columbus Have in Common?



Do each exercise and find your answer in the answer column directly under it. Write the letter of the answer in the box containing the number of the exercise. If the answer has a ●, shade in the box instead of writing a letter in it.

Round to the nearest tenth.

(1) 6.43
(2) 17.19
(3) 3.751
(4) 0.5059
(5) 6.6666
(6) 37.3274
(7) 4.9009
(8) 0.0555
(9) 12.78028
(10) 4.96

Answers:

(S) 6.6
● 3.8
(E) 6.4
(N) 17.3
(E) 0.5
(H) 17.2
(T) 6.7
(A) 0.6

Answers:

(L) 5.1
(Y) 12.8
(E) 37.3
(C) 0.2
(R) 0.1
(W) 5.0
(I) 12.6
● 4.9

Round to the nearest hundredth or to the nearest cent.

(11) 8.333
(12) 0.6551
(13) 24.79006
(14) 3.845188
(15) 0.6094222
(16) $7.752
(17) $60.465
(18) $0.9493
(19) $26.4848
(20) $7.595

Answers:

(L) 0.66
(D) 3.83
(A) 0.61
(O) 24.79
(F) 0.62
(R) 8.33
● 3.85
(E) 24.81

Answers:

(L) $60.47
(B) $7.60
● $0.95
(D) $26.47
(O) $7.75
(M) $60.48
(N) $26.48
(F) $7.61

Round to the nearest whole number or to the nearest dollar.

(21) 9.356
(22) 83.9047
(23) 30.06666
(24) 9.8277
(25) 156.5
(26) $44.50
(27) $168.15
(28) $2.7633
(29) $99.909
(30) $99.099

Answers:

(F) 32
(A) 84
(S) 158
(O) 9
(S) 10
(E) 85
(I) 157
@ 3 0

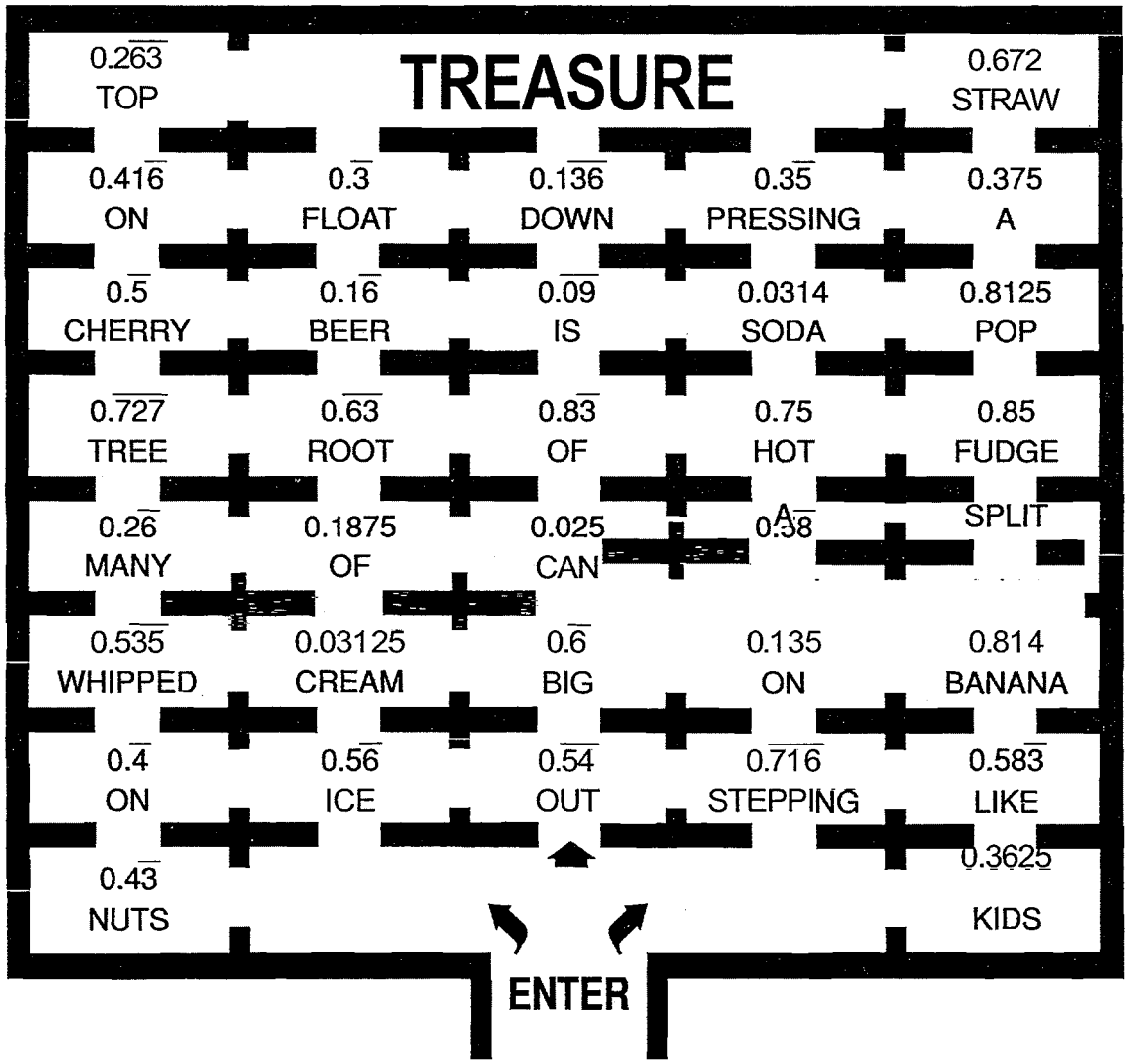
Answers:

(B) $167
(D) $3
● $45
(L) $99
(S) $4
(Y) $168
(H) $100
(S) $46

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

TOPIC 'erminating and Repeating Decimals

Maze Phrase



Name each fraction as a repeating or terminating decimal. Find your answer in the maze. SHADE IN each room that contains a correct answer.

Then find a path to the Treasure that goes only through rooms that are NOT shaded. The words in those rooms will form an a-mazing message!

(1) $\frac{5}{6}$ (2) $\frac{6}{11}$

(3) $\frac{3}{8}$ (4) $\frac{4}{9}$

(5) $\frac{5}{9}$ (6) $\frac{2}{3}$

(7) $\frac{13}{16}$ (8) $\frac{4}{15}$

(9) $\frac{7}{12}$ (10) $\frac{3}{22}$

(11) $\frac{14}{99}$ (12) $\frac{1}{32}$

(13) $\frac{3}{4}$ (14) $\frac{1}{3}$

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