Accelerated

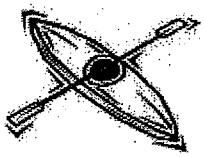
Name _____

Word Problems for PROBLEM SOLVING GAME

#1

B

Half-Moon Kayak Rentals charges $12.50 to rent a kayak, plus an additional fee of $7.50 per hour for the time the kayak is rented. His total cost was $57.50. For how many hours did he rent the kayak? (variable in the equation)



#2

C

The sum of two integers is -9. When the smaller integer is subtracted from the larger integer, the difference is 1. What are the integers? (variable in the equation)

#3

B

The attendance at Fenway Park was 35,892 on Friday. This was 3285 less than the attendance Saturday. What was Saturday's attendance? (variable in the equation)

#4

A

During a cold spell in January, 1994, the low temperatures were -22°F, -20°F, and -18°F. What was the average low temperature for those three days? (x can be at the end)

#5

B

Riviera High School will graduate 268 seniors on June 1st. The ceremony will be held in the school gymnasium. The gymnasium holds 1400 people in addition to the graduates. How many tickets should be offered to each graduate and family and friends? (x can be at the end)

#6

B

Curt Harris received a raise. He now makes $22,595 which is $150 less than twice his old salary. What was his old salary? (variable in the equation)

#7

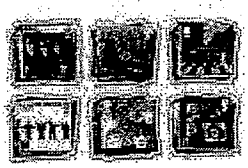
A

Peter Gumas earns $5.00 per hour busing tables at Jalapenos Grill in Walpole. How many hours must he work to earn at least $110 each week? (variable in the equation) Express as an inequality.

#8

A

Special Olympics athlete, Andy Leonard, is one of the few American athletes who can lift up to four times his own body weight. The most weight he has lifted is 385 pounds. What is his body weight, rounded to the nearest whole number? (variable in the equation) Express as an inequality.



#9

A

In 1971, first-class postage stamps cost 8 cents for the first ounce. In 1995, stamps for the same first-class mail cost 32 cents for the first ounce. How many times more did stamps cost in 1995 than in 1971? (variable in the equation)

#10

C

Carl purchased stock in the Dependable Equipment Company for $22. The price per share of the stock fell by $4.30 in the first month, rose by $2.50 in the second month, and rose by $2.60 in the third month. If he sells after the third month will he make a profit? (variable in the equation) Express as an inequality.

#11

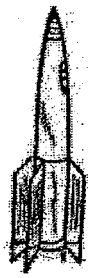
B

The elevation of the highest point in a region is 1226 m above sea level. If the difference between the highest point and lowest point in the region is 1455 m, find the elevation of the lowest point. (variable in the equation)

#12

B

Two stages of a rocket burn for a total of 114.5s. If the first stage burns for 86.8s, how long does the second stage burn? (variable in the equation)



#13

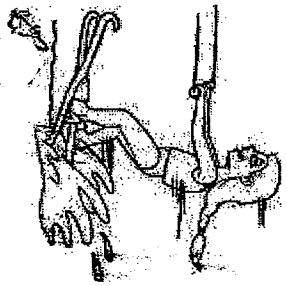
C

Donna receives an allowance every 2 weeks that includes $20 for school lunches. During the past 4 weeks, she spent $7.50, $8.25. $5.25 and $8.75 on lunches. How much did Donna have left from the money allowed for lunches for the 4 weeks? (variable in the equation)

#14

B

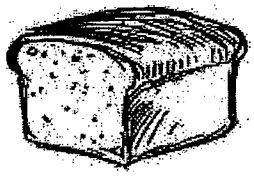
Cabin Fever Ski Resort runs a mountain slide ride during the summer months. A single ride costs $3.75 and a day's pass costs $14.00. How many times would you have to ride the slide to make it less expensive to buy a day's pass? (variable in the equation)



#15

C

Because of a grain shortage, the price of a loaf of bread increased by 2 cents. When grain became plentiful, the price decreased by 4 cents. But later it again rose by 5 cents because of inflation. If the original price was 86 cents per loaf, what was the final price? (variable in the equation)



#16

C

There is a balanced scale in front of you. On one side of the scale is 125 pennies. On the other side of the scale is 21 pennies and 4 upside down cups with an equal amount of pennies under each. How many pennies are there under each cup? Remember that the cups don't weigh anything!
(variable in the equation)

#17

C

There is a balanced scale in front of you. On one side of the scale is 312 pennies. On the other side of the scale there are 37 pennies and 5 upside down cups with an equal number of pennies under each. How many pennies under each cup? Remember the cups don't weigh anything! (variable in the equation)

#18

B

An auto shop repaired 26 cars in April. The number of cars repaired in April was five more than one-half the number of cars repaired in March. Find the number of cars repaired in March. (variable in the equation)

#19

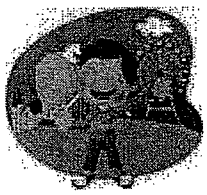
B

The amount in Lisa's checking account is $114.00 more than three-fourths the amount in her savings account. The amount in her checking account is $1056.00. Find the amount in Lisa's savings account. (variable in the equation)

#20

B

Ellen and Phil have summer jobs at an amusement park. Each week, Ellen earns $15 less than twice the amount Phil earns. Ellen earns $118 each week. How much does Phil earn each week? (variable in the equation)



#21

B

The cost for a class at Boston College is $20.00 more than two-thirds the cost for the same class at Holy Cross College. The cost for the class at Boston College is $65. Find the cost at Town College. (variable in the equation)

#22

B

Katie and John are both taking a quiz. Katie takes 12 minutes less than four-fifths as long as John. It takes Katie 60 minutes to take her quiz. How long does it take John? (variable in the equation)

#23

C

Your cell phone provider charges a monthly fee of $19.50 for 200 minutes. You are also charged $.25 per minute for each minute over 200 minutes. Last month, your bill was $29.50. How many additional minutes did you use last month? (x should be in the equation – not at the end)

#24

B

You are the service manager at an auto repair shop. You charge $32 per hour for labor plus the cost of any parts. A car needed $367 of new parts and the final bill for the car was $528. How long did it take to repair the car? Round your answer in hours and minutes. (x should be in the equation – not at the end)

#25

C

You start a business selling a special fragrance of perfume. You invest $12,000 for equipment. Each bottle costs you $0.75 to make and you sell each bottle for $1.25. How many bottles must you sell to earn a profit of $3000? (variable in the equation)

#26

B

You are sending invitations to friends for a party. You spend $13.32 on stamps to mail the invitations. Each stamp costs $.37. How many invitations are you sending? (variable in the equation)

#27

C

In 1958 the estimated population of Pennsylvania was 125,000 more than 2 times the estimated population of Rhode Island. The total population of the two states was 5,693,000. Find the estimated 1958 population of each state. (variable in the equation)

#28

B

Dario is twice as old as his younger brother and his sister is 6 years older than he is. The total of the three ages equals the age of Dario's uncle. Dario's uncle is 31. Find Dario's age. (variable in the equation)

#29

A

Sheryl purchases pencils and erasers for $12.95, a new textbook for $22.73 and notebook for $3.76. If she started with $60.00, how much does she have left? (variable in the equation)

#30

C

You are a sales representative. Each year your bonus is one sixteenth of the amount of your sales from the previous year. This year your bonus was $11,000. What were your sales last year? (variable in the equation)

#31

A

You decide to buy mom a beautiful gold bracelet for her birthday. The price in Zales is $97 less than the price in Macy's. The less expensive bracelet costs $189. What is the price of the more expensive bracelet? (variable in the equation)

#32

C

It is report card time and you are really worried about your social studies grade. Ms. Manning tells you that you have one more test, but your grades so far are 73%, 65%, 87%, 96%, 88%, and 82%. You have a deal with your parents that if you have an average of 84% or higher at the end of the term they will take you skiing. What do you have to get on that last test to have an 84% average? (variable in the equation)

#33

B

The Jacobson's sold their house for $135,000. This price is four times the amount they originally paid for it 15 years ago. How much did they pay originally for the house? (variable in the equation)

#34

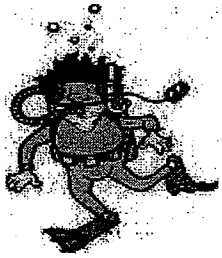
A

Jay's boy scout troop is hiking on a trail that is 75 feet above sea level. They hike into a canyon that is 12 feet below sea level. How many feet has Jay's troop hiked? (variable can be at the end)

#35

B

A diver begins an ascent from 160 feet below sea level. A few minutes later, the diver is 50 feet below sea level. How many feet did the diver ascend? (variable in the equation)



#36

C

Find the side of a square that has a perimeter equal to the perimeter of a quadrilateral with sides the length of 18 cm, 23 cm, 12 cm, and 15 cms. (variable in the equation)

#37

B

Charles is 10 years younger than Stanley. The sum of their ages is 90. Find Charles' age. (variable in the equation)

#38

C

A triangle has a perimeter of 118m. The longest side is x meters and the shortest side is 12 meters shorter than the longest side. The third side is 5 meters shorter than the longest side. What are the lengths of the three sides? (the variables will be in the equation)

#39

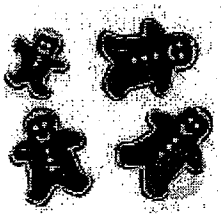
B

Kringle's Tree Farm sold 127 Christmas trees today. The number they sold decorated was 8 less than four times the number they sold undecorated. How many decorated trees and how many undecorated trees were sold? (the variable will be in the equation)

#40

C

The seventh grade teachers decided to buy giant gingerbread cookies for all the students for the holiday movie they were going to watch. Mrs. Gumas went to the bakery and ordered 257 cookies. She asked that the number of girl cookies be 10 less than two times the number of boy cookies. How many girl cookies and how many boy cookies did Mrs. Gumas buy? (variable in the equation)



#41

B

The perimeter of a rectangle is 140 m. The length is 6 times the width. What is the length and the width? (variable in the equation)

#42

A

Carlos bought 12 baseball cards, and now has 349 cards in his collection. How many cards did he have before his new purchase? (variable in the equation)

#43

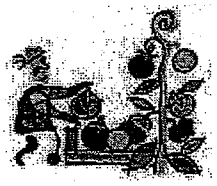
B

Twice Sharon's age plus four years is Meredith's age. Meredith is 16 years old. Find Sharon's age. (variable in the equation)

#44

B

This year Marla Mulch grew four more than twice the number of tomato plants she grew last year. This year she planted a total of 88 tomato plants. How many tomato plants did she grow last year? (variable in the equation)



#45

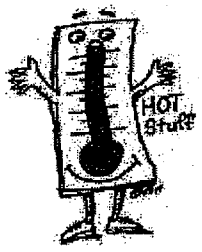
B

For a summer job, Tom plans to clean the Parga's house. He estimates that each week he will spend $1.25 and $3.80 on cleaning supplies. How much should he charge the Pargas if he wishes to make a profit of $6.50 each week? (variable in the equation)

#46

A

On a winter day, the temperature dropped from -3°C to -11°C. Find the change in temperature. (variable can be at the end)



#47

A

An investor has deposited $2000 into a special savings account. Two years later, the balance in the account is $2650. How much interest has been earned? (variable in the equation)

#48

B

By mass, 1/9 of any quantity of water consists of hydrogen. What quantity of water contains 5 g of hydrogen? (variable in the equation)

#49

A

After $525 was spent on the class trip, there was $325 left in the class treasury. How much was in the treasury before the trip? (variable in the equation)

#50

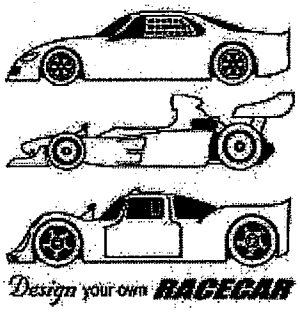
A

Eight less than a number is forty-three. Find the number. (variable in the equation)

#51

B

You are the service manager at an auto repair shop. You charge $22 per hour for labor plus the cost of any parts. A car needed $256 of new parts and the final bill for the car was $421. How long did it take to repair the car? (variable in the equation)



#52

A

At the fair, you spend $6 for some food, then use the rest of the $20 you brought for ride tickets. You buy 56 ride tickets. How much does each of the ride tickets cost? (variable in the equation)

#53

B

Your Spanish club is making posters to raise money. The printer charges a base fee of $275, plus $3 per poster for supplies. You sell each poster for $5. How many posters must you sell to make a profit of $300? (variable in the equation)

#54

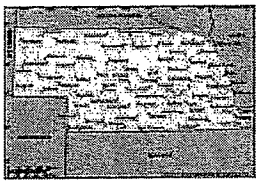
C

You start a business selling bottled fruit juices. You invest $10,000 for equipment. Each bottle costs you $0.30 to make. You sell each bottle for $0.75. How many bottles must you sell to earn a profit of $2000? Don't forget to round this answer UP! (variable in the equation)

#55

C

In 1996, the estimated population of Nebraska was about 169,000 less than 3 times the estimated population of Alaska. The total population of the two states was about 2,259,000. Find the estimated 1996 population of each state. (variable in the equation)



#56

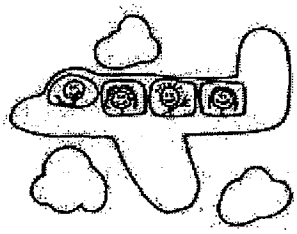
C

In 1996, the estimated population of Utah was about 363,000 more than half the estimated population of Connecticut. The total population of the two states was about 5,274,000. Find the 1996 estimated population of each state. (variable in the equation)

#57

A

You are flying at an altitude of 19,653 ft. You descend 8905 ft, rise 9842 ft, descend 14,450 ft, and descend another 6,140 ft. What is your final altitude? (variable in the equation or at the end)



#58

C

Your school is sponsoring a concert. The expenses include $800 for the band, $20 for posters, $200 for refreshments, and $70 for security. The tickets cost $5 per person. How many people must attend to make a profit of $250? (variable in the equation)

#59

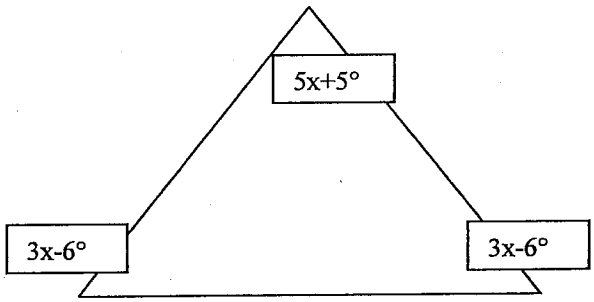
A

A civic group hosted a dinner and donated the $2500 profits to charity. The expenses for hosting the dinner were $2000. If 250 people attended, how much did the civic group charge per person? (variable can be at the end)

#60

C

The sum of the measures of the angles of a triangle is 180°. Write an equation and solve for *x*. (variable in the equation)



#61

A

One half a number plus 8 is equal to 19. Find the number. (variable in the equation)

#62

A

The sum of a number and two times itself is equal to 30. Find the number.(variable in the equation)

#63

B

Find three consecutive integers who sum is 63. (variable in the equation)

#64

B

If the sum of two consecutive even integers is 42, find the numbers. (variable in the equation)

#65

C

The one's digit of a two-digit number is twice the ten's digit. The sum of the digits of the number is 12. Find the number. (variable in the equation)

#66

C

Find the measures of each angle of a triangle if the second angle is twice as large as the first angle and the third angle is equal to the measure of the second angle. (variable in the equation)

#67

C

If the length of a rectangle is four times its width and the perimeter of the rectangle is 80 inches, find the measure of its length and width. (variable in the equation)

#68

B

Stacie needs to work on her shooting skills for basketball. She was planning on making an average of 75 shots per day for a week. On Monday she shot 79 shots, on Tuesday she shot 77 shots, on Wednesday she shot 75 shots, on Thursday she shot 65, on Friday 65 and on Saturday she shot 73 shots. How many shots would she have to make on Sunday if she wanted to have an average of 75 shots? (variable in the equation)

#69

A

Jennifer bought 5 pounds of apples for $3.45. What was the price per pound? (variable in the equation)

#70

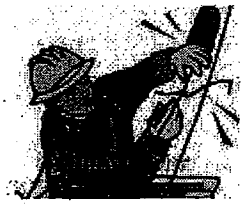
A

After Henry withdrew $350 from his account, he had $1150 left. How much money was in his account before this withdrawal? (variable in the equation)

#71

B

An electrician has a length of wire that is 120 meters long. The wire is cut into 2 pieces, one 30 m longer than the other. Find the lengths of the 2 pieces of wire. (variable in the equation)



#72

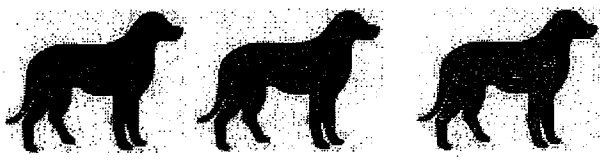
B

Find two consecutive integers whose sum is 115. (variable in the equation)

#73

B

The population of Black Labrador retrievers was 27,300 more than 3 times the population of Golden Retrievers in the United States last year. The population of both breeds of dogs combined is 4,287,000. What was the population of both dog breeds? (variable in the equation)



B

The area of a triangle is 40 square feet. The height is 10 feet. Find the length of the base. (variable in the equation)

#75

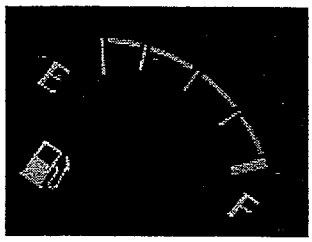
B

You earn $2.00 for every magazine subscription you sell plus a salary of $10 a week. How many subscriptions do you need to sell each week to earn at least $40 a week. (Express as an inequality) (variable in the equation)

#76

C

Bonanza Rent-A-Car rents cars for $40 per day and $.10 for every mile driven. Autos Unlimited rents cars for $50 per day with no extra charge for mileage. How many miles per day can you drive a Bonanza car if it is to cost you less than an Auto Unlimited car? (Express as an inequality) (variable in the equation)



#77

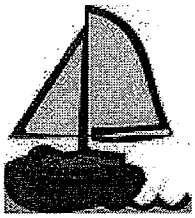
B

Three times a number increased by 8 is at least 25. What is the number. (Express as an inequality) (variable in the equation)

#78

C

A sailing race takes place on a 3000 meter course. The second leg of the course is 100 meters longer than the first, and the third leg is 100 meters longer than the 2nd. How long is the 2nd leg? (variable in the equation)



#79

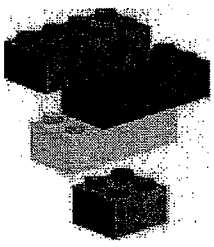
B

In the 7th grade, 86 students made the honor roll. This is 2/5 of the entire class. How many students are in the seventh grade? (variable in the equation)

#80

A

My brother has 1200 Legos. Together, my brother and I have 4000 Legos. How many Legos do I have? (variable in the equation)



#81

A

Susie needs $48.75 to buy a limited edition Barbie. Her allowance is $6.25 a week. How many weeks does she need to save to get the Barbie? (variable in the equation)

ACCELERATED WORD PROBLEMS ADDENDUM

#82

C

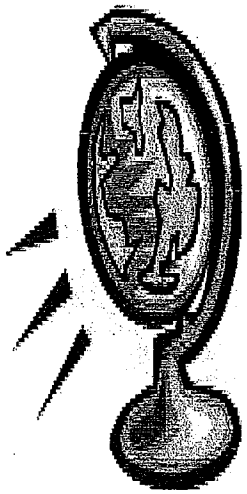
A region's time zone is determined by its longitude. The zone labeled zero is centered on the prime meridian. In the chart below, time zones to the east of the prime meridian are named by negative numbers, and time zones west of the prime meridian are named by positive integers. **To find the time in another city, subtract the time zone of the other city from the time zone at your location.**

Suppose you are in Miami and wish to know the time in Bombay. Find 5 – (-5) which is 10. Since 10 is positive, the time in Bombay is 10 hours ahead of Miami. So at 1:00 p.m. in Miami, it is 11:00 p.m. in Bombay. (x can be at the end)

a) If the time in Los Angeles is 2:00 p.m. find the time in Rome.

b) If the time in Miami is 11:00 a.m., find the time in Honolulu.

c) If the time in Honolulu is 3:00 a.m., find the time in Paris.



City	Time Zone
Bombay, India	-5
Honolulu, USA	11
Los Angeles, USA	8
Miami, USA	5
Paris, France	0
Rome, Italy	-1

#83

C

The sum of the measures of the angles of a triangle is 180°. Find the measures of the three angles below. (the variables should be in the equation)

A = 3y + 16°

B = y + 25°

C = 8y – 2°

84

C

A bookstore received a shipment of books. Twenty were sold and 2/5 of those remaining were returned to the publisher. If 48 books were returned, how many books were in the original shipment? (variable in the equation)

#85

B

You have a job mowing lawns for *x* dollars per lawn. The table shows the number of lawns you mowed each day during a week. That week, you earned $252. How much are you paid per lawn? (variable in the equation)

M	T	W	Th	F	S
1	2	2	1	3	5

#86

C

In a three-digit number, the one's digit is three more than the hundred's digit, and the ten's digit is one more than the hundred's digit. If the sum of the three digits is 10, find the number. (variable in the equation)

#87

C

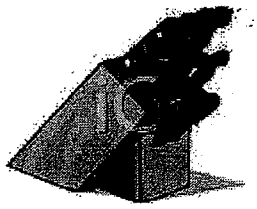
If a person has three times as many quarters as dimes and the total amount of money is $5.95, find the number of quarters and dimes. (variable in the equation)

#88

C

A clerk is given $75 in bills to put in a cash drawer at the start of a workday. There are twice as many $1 bills as $5 bills and one less $10 bill than $5 bills. How many of each type of bill are there? (variable in the equation)

#89



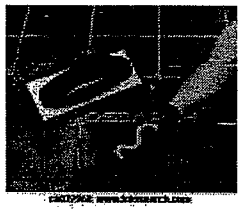
C

You are a Cutco Knife sales representative and vice president. You receive a bonus that is 1/16 the amount by which you go above last year's sales. This year your sales totaled $575,000. If this year's bonus was $6300, what were your total sales last year? (variable in the equation)

#90

C

You own a tile installation company. You install green tiles for x dollars per tile. This week your profit was $8400 and came from installing 220 green tiles. You had to buy cement for $1050, wax for $345 and green tiles for $3405. How much did you charge per tile to install the green tiles? (variable in the equation) Round to the nearest hundredth.

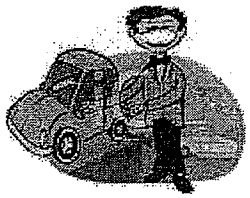


#91

C

When the gas gauge on her car was on the 3/8 mark, Karen pumped 15 gallons of gas into the tank in order to fill it. How many gallons of gas does the tank in Karen's car hold? (variable in the equation)

#92



C

Benny is a used car salesman in Waltham. He receives a bonus which is 1/5 the amount which he goes above his last year's sales. His bonus this year was $2450 and his sales last year were $240,000. What were his sales this year?