PRACTICE WITH WORD PROBLEMS
AFTER CHAPTER 4

For each problem below, tell what the variable represents, show an equation with the variable in the equation (not at the end) and then solve, showing ALL OF YOUR WORK!!!!

1) The Verizon Telephone Company is offering a special deal. You pay $4.50 for the plan and then pay only $.35 a call, wherever you want to call. How many calls can you make for $25.00?

2) You want to play lacrosee in the spring so you decide that you want to practice an average of 30 minutes a day each week, except for Sundays. On Monday you practice for 25 minutes, on Tuesday for 15 minutes, on Wednesday for 40 minutes, Thursday for 15 minutes and Friday for 30 minutes. How many minutes must you practice on Saturday to keep your average?

3) Your father is an insurance salesman and each year his bonus is one sixth of the amount of his policy sales from the previous year. This year his bonus was $16,000. What were his policy sales last year?

4) The number of students who played sports at Medfield High School was 83 more than three times the amount who played sports at Garfield High School in Cartoonland, MA. The total number of students who participated in sports is 687. How many play sports in each school?

5) Andrea is 17 years younger than her aunt. Together their ages equal 87. How old is Andrea and how old is her aunt?

6) A rectangle has a perimeter of 153 cm. Its length is 8 cm more than four times its width. Find the rectangle's dimensions (length and width).

7) The sum of two numbers is 188. The smaller is one hundred less than two times the larger. Find both numbers.

8) You want to buy donuts for as many kids on your bus as you can. You have $21.00 to spend on the donuts and each donut cost $.85. How many donuts can you buy?

9) The Girl Scouts in Medfield raised $235 more than two times what the Boy Scouts raised for the Tsunami relef effort. Together the two organizations raised $874. How much did each group raise?

10) Your family would like to go to Florida over February vacation. Your dad goes online on Saturday for $135 roundtrip for each ticket, but your mom is not sure of the dates yet, so he waits a week to get the tickets. When he gets online a week later the tickets are now $405 rountrip for each ticket. How many times more are the tickets the 2nd time he tried?

Click here to fly to the answers!!

WORD PROBLEM PRACTICE

Remember to decide what the variable will stand for and then show your equation.

1) The sum of two numbers is 19. The second number is 8 less than twice the first. Find the numbers.

Let x = 1st number
2x -8 = 2nd number
x + 2x -8 = 19
3x - 8 = 19
3x = 27
x = 9
First number = 9
2nd number = 10

2) The second of two numbers is 4 more than the first. If the second number is increased by 1, the result is twice the first number. Find the numbers.

Let x = 1st number
4 + x = 2nd number
4 + x + 1 = 2x
5 + x = 2x
5 = x
First number = 5
2nd number = 9

3) Eleanor had three times as many quarters as nickels. She had $1.60 in all. How many nickels and how many quarters did she have?

Let x = nickels
3x = quarters
5x + 75x =160
80x=160
x=2

2 nickels
6 quarters

4) Side B of a triangle is twice as long as side C. Side A is 3 feet longer than side B. The perimeter is 59 ft. Find the length of each side.

A = 2x + 4
B = 2x
Let C = x
2x + 4 + 2x + x = 59
5x + 4 = 59
5x = 55
x = 11

Side A = 26 ft.

ANSWERS FOR WORD PROBLEM PRACTICE

1) Let x = # of calls
$$4.35 + .35x = 25.00$$
$$.35x = 20.65$$
$$x = 59 \text{ calls}$$

2) $$25 + \underline{15 + 40 + 15 + 30 + x} = 30$$
$$6$$

$$\underline{125 + x} = 30$$
$$6$$

$$125 + x = 180$$
$$x = 55 \text{ minutes}$$

3) Let x = policy sales last year
$$1/6x = 16000$$
$$x = \$96,000$$

4) Let x = Garfield High School
$$83 + 3x = \text{Medfield High School}$$

$$x + 83 + 3x = 687$$
$$4x + 83 = 687$$
$$4x = 604 \text{ students}$$
$$x = 151 \text{ students}$$

5) Let x = Aunt's age
$$x - 17 = \text{Andrea's age}$$

$$x + x - 17 = 87$$
$$2x - 17 = 87$$
$$2x = 104$$
$$x = 52$$
Aunt = 52 years old
Andrea = 35 years old

6) Let x = width
Length = 8 + 4x

$$2x + 2(8 + 4x) = 146$$
$$2x + 16 + 8x = 146$$
$$10x + 16 = 146$$
$$10x = 130$$
$$x = 13 \text{ cm}$$
length = 60 cm

7) Let x = larger #
Smaller - 2x - 100

$$x + 2x - 100 = 188$$
$$3x - 100 = 188$$
$$3x = 288$$
$$x = 96$$
larger # = 96
smaller # = 92

8)   Let x = # of donuts

$$.85x = 21$$
$$x = 24.7$$
24 donuts

9)   Let x = Boy Scouts
$$2x + 235 = \text{Girl Scouts}$$

$$x + 2x + 235 = 874$$
$$3x + 235 = 874$$
$$3x = 639$$
$$x = 213$$

10)   Let x = times more tickets are now
$$135x = 405$$
$$x = 3 \text{ times}$$

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