**Math 9 Algebra Word Problems Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Day \_\_\_ Period \_\_\_

Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Your task is to work through each of the word problems below. You do not need to go in order. If you get stuck, talk it out and/or ask for help. Word problems are often less ‘scary’ when 3 people’s brains are working together!

Questions: Show steps on a separate piece of paper. Every person in your group needs to write out the answers.

1. The Mackenzie River is 1183km longer than the St. Lawrence. The sum of their lengths is 7299km. How long is each river?
2. A picture is 5cm longer than it is wide. The perimeter of the picture is 90cm. What is the width of the picture?
3. The sum of two numbers is 39. Twice the first number plus 3 times the second number is 101. Find the numbers.
4. Margaret has twice as many dimes as nickels. The total value is $3.50. How many nickels does she have?
5. Kyriakos has $0.85 in nickels and dimes. He has two more nickels than dimes. How many nickels and dimes does he have?
6. The cost of a pen is 3 times the cost of a pencil. The cost of 4 pencils and 3 pens is $9.75. What is the cost of a pencil?
7. Large pizzas cost $12.50 and small pizzas cost $9.00. The pizza parlour sold 38 pizzas with a total value of $415.50. How many of each type of pizza did the parlour sell?
8. The flowing formula gives the ideal amount of sleep needed each night by people 19 years old or younger: 
9. The amount of sleep is ‘s’ hours, and ‘n’ is the age in years. How much sleep does a 14-year old need?
10. Jason is 10 years old. He gets 9 hours of sleep each night. According to the formula is that enough?
11. Determine the value of x so that the square and the rectangle shown have equal perimeters.

1.4x

4.5x – 0.24

2.1x+6

1. Calvin has $45.25 saved and earns $7.25/week. Dakota has $25.25 saved and earns $9.75/week. In how many weeks will they have the same amount?

***Answers:***

1) 3058km; 4241km

2) 20cm

3) 16, 23

4) 14

5) 7 nickels; 5 dimes

6) $0.75

7) 17 small; 21 large

8) 10.5 hours 8b) No, requires 12.5 hours

9) x= 7.2

10) 8 weeks