

Name: _____ Period: _____
First Last

Objective 7 – Assignment List

Word Problems: *Translate and solve word problems with variables and equations.*

Monday

In Class Activity: Jumping to Solutions

In Class Practice: Jumping to Solutions

Watch: Solving Word Problems – Part 1

Tuesday

In Class: Word Problems – Set 1

Watch: Solving Word Problems – Part 2

Wednesday

In Class: Word Problems – Set 2

At Home:

Thursday

In Class:

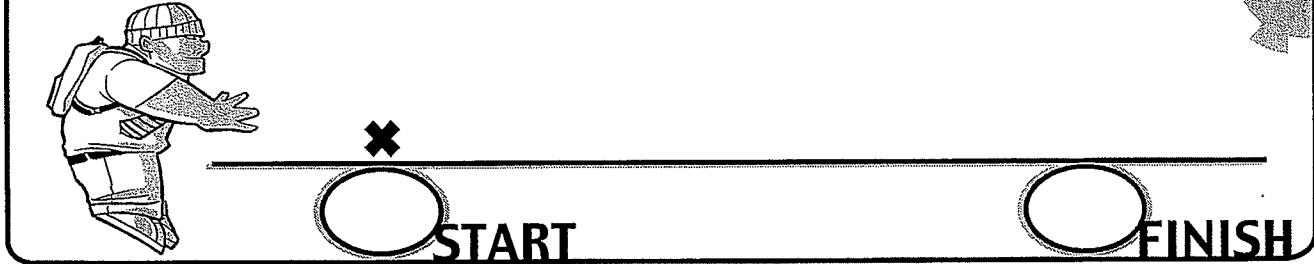
At Home:

Friday

In Class: Unit 2 TEST – Solving Equations

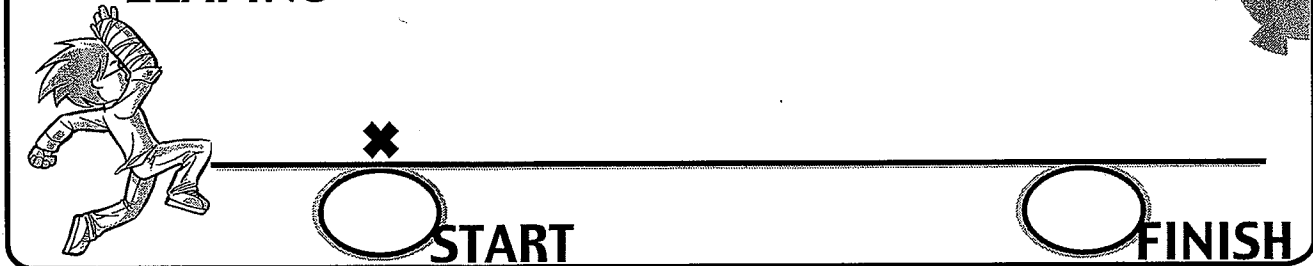
JUMPING TO SOLUTIONS

HOPPING



1. Make a sketch of the hops on the line and record the start and finish position of the hopper.
2. Complete the sentence:
The hopper starts at _____ centimeters, takes _____ hops, and finishes at _____ centimeters.
3. Translate the sentence into an equation. Use H to represent a hop.
4. Use the sketch, numbers, and equation to determine the length of each hop.

LEAPING



1. Make a sketch of the leaps on the line and record the start and finish position of the leaper.
2. Complete the sentence:
The leaper starts at _____ centimeters, takes _____ leaps, and finishes at _____ centimeters.
3. Translate the sentence into an equation. Use L to represent a leap.
4. Use the sketch, numbers, and equation to determine the length of each leap.

JUMPING TO SOLUTIONS

For each situation, make a sketch, write an equation, and determine the length of the jump, hop, or leap.

1. The student stands at the 12-foot mark and makes five jumps to finish at the 27-foot mark.

2. The frog is at the 18-inch mark and takes seven hops to finish at the 53-inch mark

For each problem think of it as a jumping problem, write an equation, and solve for the unknown.

3. A 150-foot rope is cut into six equal pieces with a scrap of six feet left over. How long is one of the six pieces of rope?
4. A 96-inch board is cut into seven equal pieces with five inches of waste. How long is one of the pieces?
5. Returning from a trip to Europe a customer deposited 150 Euros and \$85 into his account. The teller informed her that a value of \$310 had been deposited. How many dollars is each Euro worth?
6. The gym has an initiation fee of \$59 plus monthly dues of \$27. If Jacob has \$450 dollars how many months of the gym can he afford?
7. Snowy Tree Crickets are very accurate thermometers. If you count the number of chirps in a minute, divide that by five and add 40 you get the Fahrenheit temperature. On a starry summer evening when it is a balmy 70° Fahrenheit how many chirps will you hear each minute?
8. Sam is 1,230 feet from the finish line and runs 17 feet per second. How long will it take Sam to enter the stadium 350 feet from the finish?

WORD PROBLEMS – Set 1

Identify the value you need to know to answer the question and define a variable to represent it. Translate the situation into an equation using the variable. Then solve for the variable to answer the question.

A. The sum of three consecutive odd numbers is 2619. What are the three numbers?

B. The longest side of a triangle is twice the length of the shortest side. The third side is two centimeters longer than the shortest side. The triangle has a perimeter of 38 cm. How long are the three sides?

1. A cell phone has a base monthly rate of \$12 plus a \$0.25/min rate. Priscilla has \$28 a month budgeted for phone service. How many minutes can she afford to talk on the phone a month?

2. A 102 inch board is cut into two pieces so that one piece is five times as long as the other. How long is the shorter piece?

3. A pie-eating champion trained seven consecutive days for this year's contest. Each day he ate two more pies than the day before. He ate a total of 133 pies while in training. How many pies did he eat the first day of training?

4. A pair of pants is \$5 less than twice the price of a shirt and shoes are three times the price of a shirt. How much does each item cost if you spent \$79 on all three?

5. The total cost for a chair, desk, and a lamp is \$562. The desk costs four times as much as the lamp and the chair costs \$23 less than the lamp. Find the cost of the chair and the desk.

6. The pet store has 40 animals all birds and dogs. The number of birds is 22 more than twice the number of dogs. How many dogs are at the pet store?

7. A set of math blocks contain three shapes, flats, sticks, and units. There are three times as many flats as sticks, and 30 fewer sticks than units. There are 600 blocks in a set. How many of each type of block are in a set?

8. The sum of the angles of a triangle is 180° . The biggest angle is 25° less than three times the smallest, and the medium angle is 25° more than the smallest. What are the measures of the three angles?

9. The perimeter of a triangle is 34 inches. The second side is twice as long as the first side. The third side is four centimeters shorter than the second side. How long is first side?

10. Gertrude is twice as old as her little brother Jeremy. Jeremy is two years older than Silvia. The sum of the three children is 26. How old is Jeremy?

WORD PROBLEMS – Set 2

Identify the value you need to know to answer the question and define a variable to represent it. Translate the situation into an equation using the variable. Then solve for the variable to answer the question.

- A. A rectangular garden has a length of 2.5 meters more than its width. The fence around the garden is 45 meters long. What is the width of the garden's fenced area?
 - B. An equilateral triangle with sides of five sticks and three units has a perimeter equal to an isosceles triangle with a base of two sticks and seven units and two sides of five sticks and ten units. How long is a stick?
1. What is the smallest of four consecutive odd integers where the sum of the second integer and twice the fourth is 65?
 2. An equilateral triangle with sides made of three sticks and five units has a perimeter of 96 units. How long is each of the sticks?
 3. An isosceles triangle has congruent angles that are 10 degree less than half the other angle. The sum of all three angles is 180° . What is the measure of the largest angle?
 4. The length of a rectangular field is seven meters less than four times the width. The perimeter is 136 meters. How long is the field?
 5. The width of a rectangle is 6 cm shorter than the length. The perimeter of the rectangle is 92 centimeters. What is the length of the rectangle?
 6. A rectangle with a width of two sticks and three units and a length of three sticks and five units has a perimeter of 66 units. How long is a stick?
 7. The length of Sierra's rectangular garden is two meters longer than twice its width. The perimeter is 46 meters. Find the dimensions of the garden.
 8. The base of a rectangle is 17 cm longer than its height. The rectangle has perimeter of 122 cm. What is the height of the rectangle?
 9. Twins Mo and Jo deposit the same amount of money into their savings accounts each month. If Mo starts with \$50 and saves for eight months he will have the same amount of money as Jo who starts with \$20 and saves for 10 months. How much do they deposit in their accounts each month?
 10. Two equilateral triangles' perimeters are equal. One has sides of seven sticks and 11 units, the other has sides of nine sticks and one unit. How long is a stick?