

Seasonal Systems of Equations

Solve each problem using a system of equations and write your answer as an ordered pair. Then graph the ordered pair on the coordinate plane and label the point with the letter specified. After all questions are solved and all points plotted, connect the points in alphabetical order to reveal a hidden picture!

1. It takes Santa 5 minutes to fly 35 miles with the wind. It takes him 7 minutes to go 35 miles against the wind. Determine the speed of Santa's sleigh in still air (x) and the speed of the wind (y).

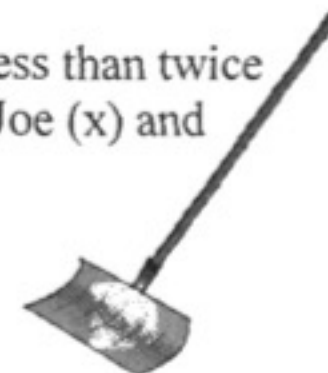
Ordered Pair M: _____

2. Eddie the elf made 13 toys one day in the workshop. Some were dolls and the rest were action figures. The number of action figures he made was one more than twice the number of dolls he made. How many dolls (x) and action figures (y) did Eddie make?

Ordered Pair E: _____

3. After a big snow storm, Joe and Jim decided to shovel driveways for money. Jim shoveled 3 less than twice as many driveways as Joe. They shoveled a total of 15 driveways. How many driveways did Joe (x) and Jim (y) each shovel?

Ordered Pair I: _____



4. Your high school is having a competition where students have to guess how many candy canes are in a jar. The tens digit is 4 more than twice the ones digit. The sum of the digits is 4. How many candy canes are in the jar? Find the tens digit (x) and the ones digit (y).

Ordered Pair O: _____

5. You and your friend go shopping for gift wrap one day. You buy 3 rolls of wrapping paper and 5 bows for a total of \$32. Your friend gets 1 roll of wrapping paper and 2 bows for \$11. How much does each roll of wrapping paper (x) and each bow (y) cost?

Ordered Pair L: _____

6. Hats and mittens are on sale at the store! One woman was able to buy 5 hats and 4 pairs of mittens for \$30. Another woman purchased 3 pairs of mittens and 2 hats for \$19. Find the price of one hat (x) and one pair of mittens (y).

Ordered Pair D: _____



7. Veronica got 3 times as many gifts as Natalie. Together Veronica and Natalie got a total of 12 gifts. How many gifts did Natalie (x) and Veronica (y) each get?

Ordered Pair F: _____

8. Jenny and Julie each drank a cup of hot chocolate after playing in the snow. Jenny put 6 more marshmallows in her cup than Julie. Together Jenny and Julie had a total of 6 marshmallows. How many marshmallows did Jenny (x) and Julie (y) each have in their hot chocolate?

Ordered Pair N: _____



9. Bobby's Christmas list had 3 more than twice as many items on it than Johnny's list. Johnny asked for 8 fewer items than Bobby. How many items were on Johnny's (x) and Bobby's (y) Christmas lists?

Ordered Pair G: _____

10. Monique has two artificial Christmas trees in her apartment. The taller tree is 1 foot shorter than 5 times the height of the smaller tree. If she stacked the shorter tree on top of the taller tree, they would be a total of 60 inches tall. Find the heights in feet of the taller tree (x) and the shorter tree (y).



Ordered Pair A: _____

11. Allentown got 2 feet less than twice the amount of snow Georgetown got. Allentown got 3 feet more snow than Georgetown. How many feet of snow did Allentown (x) and Georgetown (y) each get?

Ordered Pair J: _____

12. A 32 year old mother realized that her age is twice the sum of her two children's ages. Her son, Jose is two years older than her daughter, Sophia. How old are Sophia (x) and Jose (y)?

Ordered Pair H: _____

13. Two families go ice skating one day. The first family spends \$25 on skate rentals for 5 kids and 2 adults. The second family spends \$14 on skate rentals for 3 kids and 1 adult. How much does each child's skate rental (x) and each adult's skate rental (y) cost?

Ordered Pair C: _____



14. At Fred's house, Santa ate the same number of sugar cookies and chocolate chip cookies. Twice the number of sugar cookies he ate decreased by one equals the number of chocolate chip cookies he ate. How many sugar cookies (x) and chocolate chip cookies (y) did Santa eat at Fred's house?

Ordered Pair B: _____

15. Chris built a rectangular snow fort with a perimeter of 24 feet. The length of the fort was 8 feet less than 3 times the width. What was the length (x) and width (y) of the fort?

Ordered Pair K: _____



Solutions to the Systems of Equations

