## Introduction

Almost everybody enjoys mysteries and secrets, so these puzzles are sure to delight young math students! Each page has its own mini-mystery. Working the addition problems provides the necessary clues to solve the mystery.

The puzzles also help solvers develop important map-reading skills. Each clue is given in terms on a north, south, east, or west direction. In order to solve the mystery, a child must follow the directions correctly.

## How to Solve the Puzzles

1. Answer each addition problem.
2. In the grid, begin at the black star ( $\star$ ). Using the answer to problem 1 to tell you how many spaces to go in which direction (north, south, east, or west), draw a line from the star.
3. Using the answer to problem 2, continue drawing the line from where it stopped with problem 1.
4. Continue this process until you complete the line for problem 21. The place it stops will provide the answer to the mystery.

Note: the line you draw may go through objects, it may cross over itself, and, if the answer is zero, it will not change position.

## Problem Information

These problems are designed to give children practice with basic addition facts. They only include addition problems in which both addends are numbers 0-9.

Additional Activity
The mini-mystery setting for each of these puzzles can also be used as a writing prompt. Encourage your child to think about what might have come before and after the given information and to use their creativity to expand the "snapshot" into a full story.

I hope these puzzles provide many hours of fun math for you and the children you know.

[^0]
## sAMPLE PLZZLE \#1



One of these pens writes invisible messages that can be read by your friend with special glasses. Draw a path to find which pen you should use to write your secret message to him.

1. $3+$ $\qquad$ $=11(\mathrm{~W})$
2. $8+$ $\qquad$ $=11(\mathrm{~S})$
3. $9+$ $\qquad$ $=10(\mathrm{~W})$
4. $5+$ $\qquad$ $=9$
(S)
5. $4+$ $\qquad$ $=12$ (E) 16. $9+$ $\qquad$ $=12(\mathrm{~S})$
6. $5+$ $\qquad$ $=12(E)$
7. $6+$ $\qquad$ $=10(\mathrm{~N})$ 17. $6+$ $\qquad$ = 11 (W)
8. $7+$ $\qquad$ $=11$ (S) 11. $4+$ $\qquad$ $=11(\mathrm{~W})$
9. $4+$ $\qquad$ $=8$
10. $3+$ $\qquad$ $=8(W)$
11. $8+$ $\qquad$ $=12(\mathrm{~N})$
12. $7+$ $\qquad$ $=12(\mathrm{~W})$
13. $7+$ $\qquad$ $=10(\mathrm{~N})$
14. $2+$ $\qquad$ $=9$
(E) 20. $9+$ $\qquad$ $=11(\mathrm{~S})$
15. $6+$ $\qquad$ $=12(E)$
16. $8+$ $\qquad$ $=10(\mathrm{~S})$
17. $6+$ $\qquad$ $=9(\mathrm{~W})$
$\qquad$ pen.

## sAMPLE PLZZLE \#2



One of the ducks swimming in the pond lays golden eggs. Use the clues from the problems below to draw a path to the special duck.

1. $3+$ $\qquad$ $=9(W)$
2. $4+$ $\qquad$ $=12(\mathrm{~S}) \quad 15.9+$ $\qquad$ $=10(E)$
3. 7 + $\qquad$ $=11(\mathrm{~N})$
4. 7 + $\qquad$ $=13$
(E)
5. $4+$ $\qquad$ $=11(\mathrm{~N})$
6. $4+$ $\qquad$ $=13(\mathrm{~W})$
7. $3+$ $\qquad$ $=10(\mathrm{~N})$
8. $6+$ $\qquad$ = $12(\mathrm{~W})$
9. $8+$ $\qquad$ $=11(\mathrm{~S})$
10. $6+$ $\qquad$ $=11$ (E)
11. $4+$ $\qquad$ $=7$
12. $6+$ $\qquad$ $=10(E)$
13. $9+$ $\qquad$ $=12(\mathrm{~S}$
14. $5+$ $\qquad$ $=9$
15. $5+$ $\qquad$ $=12(\mathrm{~N})$
16. $8+$ $\qquad$ $=12$
(E) 20. 9 + $\qquad$ $=13(\mathrm{~S})$
17. $8+$ $\qquad$ = $13(\mathrm{~W})$ 14. $5+$ $\qquad$ $=8$
(S) 21. 9 + $\qquad$ $=11(W)$
$\qquad$ .

## SAMPLE PLZZLE \#3



One clear, frosty night you look through your telescope and discover a star that's never been seen before! Use the clues to draw a path to the newly discovered star.

1. $4+$ $\qquad$ $=7$
(S) 8. $9+$ $\qquad$ $=13(W) \quad 15.6+$ $\qquad$ $=13(\mathrm{~S})$
2. $5+$ $\qquad$ $=11(E)$
3. $4+$ $\qquad$ $=11(\mathrm{~S})$
4. $8+$ $\qquad$ $=12(E)$
5. $4+$ $\qquad$ $=9$
(S) 10. $9+$ $\qquad$ = 12 (E) 17. $6+$ $\qquad$ $=10(\mathrm{~N})$
6. $3+$ $\qquad$ $=12(\mathrm{~W})$
7. $6+$ $\qquad$ $=9$
(N) 18. $8+$ $\qquad$ $=11(\mathrm{~W})$
8. $8+$ $\qquad$ $=10(\mathrm{~N})$
9. $4+$ $\qquad$ $=13(\mathrm{~W})$
10. $6+$ $\qquad$ $=11(\mathrm{~S})$
11. $5+$ $\qquad$ $=13$ (E)
12. $7+$ $\qquad$ $=11(\mathrm{~N})$
13. $7+$ $\qquad$ $=9$
14. $6+$ $\qquad$ $=12(\mathrm{~N})$
15. $8+$ $\qquad$ $=13(\mathrm{~W})$
16. $5+$ $\qquad$ $=12(\mathrm{~N})$
$\qquad$ is the new one.

## SAMPLE PLZZLE \#4



Riddle: Why shouldn't you tell secrets in the garden? To find the answer use the problem clues to draw a path. Write each letter and word space ( $\square$ ) on the line below as you pass through it.

1. $5+$ $\qquad$ $=14(E)$
2. $8+$ $\qquad$ $=11(\mathrm{~N})$
3. $7+$ $\qquad$ $=16(\mathrm{~W})$
4. $9+$ $\qquad$ $=17(\mathrm{~S})$
5. $8+$ $\qquad$ $=15(E)$
6. $5+$ $\qquad$ $=7$
7. $6+$ $\qquad$ $=11$ (E)
8. $9+$ $\qquad$ = 12 (S) 17. $9+$ $\qquad$ $=13(E)$
9. $7+$ $\qquad$ $=14(N)$
10. $9+$ $\qquad$ $=18(E)$
11. $8+$ $\qquad$ $=14(N)$
12. $6+$ $\qquad$ $=15(\mathrm{~W})$
13. $6+$ $\qquad$ $=13(\mathrm{~N})$
14. $8+$ $\qquad$ $=17(E)$
15. $8+$ $\qquad$ $=14(\mathrm{~S})$
16. $9+$ $\qquad$ $=14(\mathrm{~W})$
17. $9+$ $\qquad$ $=11(\mathrm{~S})$
18. 7 + $\qquad$ $=12(\mathrm{~W})$
19. $7+$ $\qquad$ $=13(\mathrm{~S})$
20. $9+$ $\qquad$ $=16(\mathrm{~W})$
sOLLTION TO PLZZLE \#1


One of these pens writes invisible messages that can be read by your friend with special glasses. Draw a path to find which pen you should use to write your secret message to him.

1. $3+8=11(\mathrm{~W})$
2. $8+3=11(\mathrm{~S})$
3. $9+\ldots=10(W)$
4. $5+4=9(\mathrm{~S})$
5. $4+8=12(E)$
6. $9+3=12(\mathrm{~S})$
7. $5+7=12(E)$
8. $6+4=10(\mathrm{~N})$
9. $6+5=11(W)$
10. $7+4=11$ (S)
11. $4+7=11(W)$
12. $4+4=8(N)$
13. $3+5=8(\mathrm{~W})$
14. $8+4=12(\mathrm{~N})$
15. $7+5=12(W)$
16. $7+3=10(\mathrm{~N})$
17. $2+7=9(E)$
18. $9+2=11(\mathrm{~S})$
19. $6+6=12(E)$
20. $8+2=10(\mathrm{~S})$
21. $6+3$
$=9(\mathrm{~W})$ You should use the $\qquad$ red $\qquad$ pen.

SOLUTION TO PLZZLE \#3


One clear, frosty night you look through your telescope and discover a star that's never been seen before! Use the clues to draw a path to the newly discovered star.

1. $4+3=7(\mathrm{~S})$
2. $9+4=13(W)$
3. $6+\ldots=13(\mathrm{~S})$
4. $5+6=11(E)$
5. $4+7=11(\mathrm{~S})$
6. $8+4=12(E)$
7. $4+5=9(\mathrm{~S})$
8. $9+3=12(\mathrm{E})$
9. $6+4=10(\mathrm{~N})$
10. $3+9=12(\mathrm{~W})$
11. $6+3=9(N)$
12. $8+3=11(W)$
13. $8+2=10(\mathrm{~N})$
14. $4+9=13(W)$
15. $6+5=11(\mathrm{~S})$
16. $5+8=13(E)$
17. $7+4=11(N)$
18. $7+2=9(E)$
19. $6+6=12(\mathrm{~N})$
20. $8+5=13(W)$
21. $5+7=12(\mathrm{~N})$ Star number $\qquad$


One of the ducks swimming in the pond lays golden eggs. Use the clues from the problems below to draw a path to the special duck.

1. $3+6=9(W)$
2. $7+4=11(\mathrm{~N})$
3. $4+9=13(W)$
4. $8+3=11(\mathrm{~S})$
5. $6+4=10(\mathrm{E})$
6. $5+7=12(\mathrm{~N})$
7. $8+5=13(W)$
8. $4+8=12(\mathrm{~S})$
9. $7+6=13(E)$
10. $3+7=10(\mathrm{~N})$
11. $6+5=11(E)$
12. $9+3=12(\mathrm{~S})$
13. $8+4=12(E)$
14. $5+3=8(\mathrm{~S})$
15. $9+1=10(E)$
16. $4+7=11(\mathrm{~N})$
17. $6+6=12(W)$
18. $4+3=7(S)$
19. $5+4=9(\mathrm{E})$
20. $9+4=13(S)$
21. $9+2=11(W)$

Which duck lays the golden eggs? $\qquad$
sOLLITION TO PLZZLE \#4


Riddle: Why shouldn't you tell secrets in the garden?
To find the answer use the problem clues to draw a path. Write each letter and word space ( $\square$ ) on the line below as you pass through it.

1. $5+9=14(E)$
2. $8+3=11(\mathrm{~N})$
3. $7+9=16(W)$
4. $9+8=17(\mathrm{~S})$
5. $8+7=15(E)$
6. $5+2=7(\mathrm{~S})$
7. $6+5=11(E)$
8. $9+3=12(\mathrm{~S})$
9. $9+4=13(E)$
10. $7+7=14(\mathrm{~N})$
11. $9+9=18(E)$
12. $8+6=14(N)$
13. $6+9$ $=15(\mathrm{~W})$
14. $6+7=13(N)$
15. $8+9=17(E)$
16. $8+\underline{6}=14(\mathrm{~S})$
17. $9+5=14(W)$
18. $9+2=11(\mathrm{~S})$
19. $7+5=12(W)$
20. $7+6=13(S)$
21. $9+7=16(\mathrm{~W})$

[^0]:    A word about the author
    Evelyn has undergraduate and masters degrees in mathematics, specialist and doctoral degrees in mathematics education, and both regular and Montessori certification. She has taught at the elementary, middle school, high school, college, and graduate school levels. Most recently she has taught kindergarten, because that's her favorite age. As a parent of three, she has had much experience providing children with stimulating educational activities, not only in the classroom, but also in the home. She is the author of over a dozen puzzle books, including Addition Adventures.

