

# "Happy Birthday to You"

Solving Equations  
with Whole  
Numbers—Addition  
and Subtraction

Just about everybody knows the song "Happy Birthday to You." Composed in 1893, it has been sung at birthday parties for more than 100 years. Two sisters wrote the song. Who were they?

**Answer:**

$$\frac{18}{19} \frac{15}{31} \frac{41}{72} \frac{69}{72} \frac{8}{7} \frac{11}{6} \frac{69}{15} \frac{31}{41} \frac{146}{41} \frac{69}{41}$$

$$\frac{19}{19} \frac{31}{31} \frac{72}{72} \frac{72}{72} \frac{7}{7} \frac{6}{6} \frac{15}{15} \frac{41}{41} \frac{41}{41}$$



To answer the question, solve the equations. Write the letter of the problem in the space above its answer. (Some letters will be used more than once. Some letters will not be used.)

E.  $8 + n = 19$

$n =$  \_\_\_\_\_

P.  $n - 7 = 12$

$n =$  \_\_\_\_\_

N.  $101 = n - 45$

$n =$  \_\_\_\_\_

A.  $n + 12 = 43$

$n =$  \_\_\_\_\_

D.  $56 = n - 13$

$n =$  \_\_\_\_\_

I.  $n + 14 = 29$

$n =$  \_\_\_\_\_

U.  $n - 8 = 8$

$n =$  \_\_\_\_\_

H.  $n = 82 - 76$

$n =$  \_\_\_\_\_

K.  $n = 324 - 192$

$n =$  \_\_\_\_\_

R.  $26 + n = 34$

$n =$  \_\_\_\_\_

M.  $92 + n = 110$

$n =$  \_\_\_\_\_

T.  $n - 18 = 54$

$n =$  \_\_\_\_\_

S.  $n - 32 = 51$

$n =$  \_\_\_\_\_

L.  $17 + n = 58$

$n =$  \_\_\_\_\_

Y.  $n + 65 = 72$

$n =$  \_\_\_\_\_