

# Word Problems Worksheet Answer Key

## *Not Like Tracking Changes or Inputting Tables*

Translate the following statements into mathematical symbols.

- John has eight times as many songs on iTunes as Jill has. If Jill has 15 songs, how many does John have?  
 $J = 8(15) = 120$  songs
- Sarah spent \$24 on bagels. This was \$4 more than twice the amount she paid for coffee. How much did she spend on coffee?  
 $4 + 2x = 24; x = \$10$
- The product of two consecutive positive numbers is 4 more than the smaller number. Find the numbers.  
 $x(x+1) = 4+x$ ; the numbers are 2 and 3
- The number of boys in a class is one more than twice the number of girls. If there are 28 students in the class, how many of them are girls?  
 $b = 1 + 2g$  and  $(1 + 2g) + g = 28$ ; there are 9 girls.
- The area of a circle is  $9\pi$ . Find the diameter of the circle.  
 $\pi(r)^2 = 9\pi, r = 3$ ; diameter = 6
- The average of two consecutive odd numbers is 18. Find the numbers.  
 $\frac{(2x+1)+(2x+3)}{2} = 18$ ; the numbers are 17 and 19
- Divide \$54 among 3 people so that the third person gets twice as much as the first and the second person gets 1\$ less than the third. How much does the first person get?  
 $x + (2x - 1) + 2x = 54; x = \$11$
- The ratio of 6 more than twice a number and 1 less than the number is 6. Find the number.  
 $\frac{6+2x}{x-1} = 6; x = 3$
- Sue spent \$108 on shoes. If she bought them at a 10% discount, how much did the shoes cost originally?  
 $p - 0.1p = 108; p = \$120$
- John, Betty and Sam bought 35 comic books. John bought 5 times as many Betty bought and Sam bought eight less than John. How many did Betty buy?  
 $5B + B + (5B - 8) = 25; B = 3$

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