## Word Problem Worksheet

## Show all equations and work on a separate sheet of paper!

1. The length of a rectangle is 3 m more than the width. What are the dimensions if the perimeter is 15 m ?
2. Seven times a smaller number is 4 more than twice a larger, and the sum of the two numbers is 16 . What are the two numbers?
3. Two consecutive odd integers add to 24 . What are the two numbers?
4. Six times a number decreased by 5 is -14 . What is the number?
5. The length of a rectangle is 6 inches less than four times the width. If the perimeter is 23 inches, then what are the dimensions?
6. Three times a number, decreased by eight, is the same as twice that number. Find the number.
7. The greater of two consecutive integers is 15 more than twice the smaller. What are the two numbers?
8. Twice a smaller number is 18 less than the larger, and their difference is 11 . What are the two numbers?
9. The difference of two numbers is four and the sum of their squares is 58 . What are the two numbers?
10. The length of a rectangle is twice the width. The perimeter is 84 cm more than the width. Find the dimensions.
11. The sum of two numbers is 5 , and the smaller one squared is 7 more than the larger. What are the two numbers?
12. When $1 / 5$ of a number is decreased by 7 , the result is 16 . What is the number?
13. The sum of two numbers is 32 . The larger number is 12 greater than twice the smaller. What are the two numbers?
14. The square of a number is 21 less than 10 times that number. What is that number?
15. If twice the width of a rectangle is six feet more than the length, and the area is $80 \mathrm{ft}^{2}$, then what is width?
16. Four times a number, increased by 25 , is 13 less than 6 times the number. What is the number?
17. A rectangular garden has a perimeter of 66 feet and an area of $216 \mathrm{ft}^{2}$. What are the dimensions?
18. Jim's salary is $2 / 3$ of Alice's. Together they earn $\$ 600$ per week. How much does each one make?
19. The difference of two numbers is 5 . The sum of their squares is 233 . Find the two numbers.
20. If the cost of a shirt is $\$ 4$ more than the cost of a hat, and if 7 of those shirts cost the same as 9 of the hats, then what is the cost of the shirt?
21. The sum of the squares of two consecutive even integers is 340 . Find the two integers.
22. The sum of five consecutive integers is 115 . What are the five numbers?
23. A fenced rectangular pen is built for a dog along the side of a building, such that the building is one of the four sides of the pen. The area of the pen is $48 \mathrm{~m}^{2}$, and the amount of fencing is 20 meters. Find the dimensions of the pen.
24. Two consecutive even integers are such that the sum of their squares is 100 . Find the two numbers.
25. The sum of two numbers is 15 , and three times one of the numbers is 11 less than five times the other. Find the numbers.
26. Bill is $2 / 3$ of Mark's age. If Mark is 5 years older than Bill, then how old is Bill?
27. The width of a rectangle is 15 cm less than its length. Find the dimensions given that its perimeter is 98 cm .
28. The difference of two numbers is 9 . Five times the smaller is 7 more than three times the larger. Find the numbers.
29. The longest side of a triangle is twice as long as the shortest side. If the third side of the triangle is 25 inches, and the perimeter is 5 feet 10 inches, then what are the lengths of the sides of the triangle?

## Challenge Problems:

1. Find three consecutive even integers such that half their sum is 7 less than the greatest.
2. The sum of two numbers is 15 . The square of the smaller subtracted from the square of the larger is 9 less than their product. What are the two numbers?

## Word Problem Test

1. Three less than four times a number is equal to that same number squared. What is the number?
2. A rectangle's length is 8 cm more than three times its width. Find the dimensions if the perimeter is 128 cm .
3. The sum of two numbers is 13 . Three times the smaller one is one less than twice the larger. What are the two numbers?
4. Three times the width of a rectangle is 6 meters less than its length. If the area is $45 \mathrm{~m}^{2}$, then what are its dimensions?
5. The sum of two numbers is 5 , and the sum of their squares is 53 . Find the two numbers.

Challenge problem: The sum of two numbers is 8 , and the sum of their squares is 19 more than their product. What are the two numbers?

