QUANTITATIVE APTITUDE- WORD PROBLEMS

There is nothing more important in mathematics than to be able to translate without knowing what words mean. Listed below are examples of statements translated to algebra. It's very important that you are familiar with these expressions and their translations so you won't later confuse algebraic difficulties with vocabulary deficiencies. – The following should be taught explicitly. Students need to memorize them!

STATEMENT	ALGEBRA
twice as much as a number	**2x**
two less than a number	**x-2**
five more than an unknown	**X+5**
three more than twice a number	**2x+3**
a number decreased by 6	**x-6**
ten decreased by a number	**10-x**
Tom's age 4 years from now	**X+4**
Separate/divide 15 into 2	**x, 15-x**
two consecutive integers	**x, x+1**
two consecutive odd integers	**x, x+2**

With this it is also essential to a list of English words to its Mathematical Meaning, which is listed below, that will help us to form various algebra and hence we can make equations.

English Word	Mathematical Meaning	Symbol/ Operation
Plus, sum, added to, increased by, more than, exceed, etc…	Addition	+
Fewer, less than, difference, decreased by, etc…	Subtraction	-
Product, of, multiply, times, etc…	Multiply	×
Divided by, for, per etc…	Division	÷
Same as, is, was, will be, etc…	Equals	=

1. One number exceeds another number by 13 and the sum of the two numbers is 35. What are the two numbers?
2. A baseball team lost 4 more games than it won. If the team played 46 games, how many did it lose? How many did it win?
3. The sum of two numbers is 57. One exceeds the other by 17. Find the numbers.
4. A man walks 9 miles and then travels a certain distance by automobile, and twice as far by train. If the whole trip is 108 miles, how far does he go by automobile? How far by train?
5. Francis has 4 times as many marbles as George and both together have 90. How many has each?
   (Questions based on Uniform Motion)
6. Ramesh starts out in his car traveling 30 mph. Four hours later, Suresh starts out from the same point at 60 mph to overtake Ramesh. In how many hours will he catch him?
7. Two men, A and B, start toward each other at the same time from points 510 miles apart. If they travel 40 and 45 miles an hour respectively, in how many hours will they meet?
   (Questions based on Age Problems)
8. Raju's age after 15 years will be 5 times his age 5 years back, what is the present age of Raju?
9. Ages of two persons differ by 16 years. If 6 year ago, the elder one be 3 times as old the younger one, find their present age.
10. The total age of A and B is 12 years more than the total age of B and C. C is how many year younger than A?
11. Six years ago, the ratio of the ages of Kunal and Sagar was 6:5, Four years hence, the ratio of their ages will be 11:10. What is Sagar age at present?
12. A man is 24 years older than his son. In two years, his age will be twice the age of his son. The present age of his son is____.
13. The sum of the present ages of a father and his son is 60 years. Six years ago, father's age was five times the age of the son. After 6 years, son's age will be____.
14. It was calculated that 75 men could complete a piece of work in 20 days. When work was scheduled to commence, it was found necessary to send 25 men to another project. How much longer will it take to complete the work?
15. A software engineer has the capability of thinking 100 lines of code in five minutes and can type 100 lines of code in 10 minutes. He takes a break for five minutes after every ten minutes. How many lines of codes will he complete typing after an hour?

16. A man bought a horse and a cart. If he sold the horse at 10 % loss and the cart at 20 % gain, he would not lose anything; but if he sold the horse at 5% loss and the cart at 5% gain, he would lose Rs. 10 in the bargain. The amount paid by him was Rs._____ for the horse and Rs._____ for the cart.
17. Five farmers have 7, 9, 11, 13 & 14 apple trees, respectively in their orchards. Last year, each of them discovered that every tree in their own orchard bore exactly the same number of apples. Further, if the third farmer gives one apple to the first, and the fifth gives three to each of the second and the fourth, they would all have exactly the same number of apples. What were the yields per tree in the orchards of the third and fourth farmers?
18. Eight friends Harsha, Farukh, Balaji, Eswar, Dhinesh, Chandra, Geetha, and Ahmed are sitting in a circle facing the center. Balaji is sitting between Geetha and Dhinesh. Harsha is third to the left of Balaji and second to the right of Ahmed. Chandra is sitting between Ahmed and Geetha and Balaji and Eshwar are not sitting opposite to each other. Who is third to the left of Dhinesh?
19. The length of the side of a square is represented by x+2. The length of the side of an equilateral triangle is 2x. If the square and the equilateral triangle have equal perimeter, then the value of x is _____.
20. A student divided a number by 2/3 when he required to multiply by 3/2. Calculate the percentage of error in his result.

1.	11 & 24	2.	21 and 25	3.	20 and 37	4.	27 and 72	5.	18 and 72
6.	4 hours	7.	6 hours	8.	10 years	9.	14 years & 30 years	10.	12 years
11.	16 years & 18 years	12.	22 years	13.	20 years	14.	10 days extra	15.	250 lines
16.	Rs. 200 & Rs. 400	17.	11 and 9	18.	Farukh	19.	4	20.	No error