Algebra Word Problems

1. Twice a number is 500 more than six times the number. What is the number?

2. Three-sevenths of a number is 24. Find the number.

3. What number increased by ¼ of itself is equal to 30?

4. Find a number such that ¼ of the number is 50 less than 2/3 of the number.

5. The denominator of a fraction exceeds the numerator of a fraction by 25. The value of the fraction is 3/8. Find the fraction.

6. If 6 times a number is decreased by 6, the result is the same as when 3 times the number is increased by 12. Find the number.

7. If 3 times a number is increased by 22, the result is 14 less than 7 times the number. What is the number?

8. Separate 84 into two parts such that one part will be 12 less than twice the other.

9. The difference between two numbers is 24. Find the numbers if their sum is 88.

10. One number is 3 times another number. If 17 is added to each, the first resulting number is twice the second resulting number. Find the two numbers.