

SUPPLEMENTARY SHEET 2
NUMBER and CONSECUTIVE INTEGER PROBLEMS

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(Note: You must know how to write a correct algebraic equation for each of the problems below. If you do not write a correct algebraic equation for any of the Word Problems given to you on your Test you will not get credit for your problem even if you have the correct answer!)

NUMBER PROBLEMS:

1. When 4 times a number is increased by 40, the answer is the same as when 100 is decreased by the number. Find the number.
2. When 7 times a number is decreased by 8, the answer is the same as when 3 times the number is increased by 4. Find the number.
3. Eight times a number increased by 9 is the same as 15 more than 7 times the number. Find the number.
4. Thirty decreased by 6 times a number is the same as 16 more than the number. Find the number.
5. When 6 times a number is increased by 11 the result is 16 less than 9 times the number. Find the number.
6. One number is twice another number. If the 12 is subtracted from the larger number the result is 7 more than the smaller number. Find the numbers.
7. The larger of two numbers is 10 more than the smaller number. Five times the larger number is 40 more than 6 times the smaller. Find the numbers.
8. If 13 is added to a number and the sum is multiplied by 3, the result is 7 times the number decreased by 9. Find the number.
9. The sum of two numbers is 57. If the larger of the two numbers is 9 less than twice the smaller, find the two numbers.
10. The total of two numbers is 35. Four times the larger number is 4 less than five times the smaller number. Find the two numbers.
11. A piece of lumber which is 55 inches long is cut into two parts such that 2 times the larger part will be 12 more than 5 times the smaller part. How large are each of the pieces of lumber?
12. The larger of two numbers is 6 less than 3 times the smaller number. Three times the larger number is 7 more than 4 times the smaller number. Find the numbers.
13. The larger of two numbers is 7 times the smaller. The larger number exceeds the smaller number by 42. Find the numbers.
14. The smaller of two numbers is 18 less than the larger number. If 5 times the larger number exceeds 4 times the smaller number by 100. Find the numbers.
15. A piece of fabric 180 inches long is cut into two pieces such that 3 times the larger piece exceeds 4 times the smaller piece by 85 inches. How large are the two pieces of fabric?

Answers:

1. 12	2. 3	3. 6	4. 2	5. 9
6. 19 and 38	7. 10 and 20	8. 12	9. 22 and 35	10. 19 and 16
11. 14 in. and 41 in.	12. 5 and 9	13. 7 and 49	14. 28 and 10	15. 65 in. and 115 in.

CONSECUTIVE INTEGER PROBLEMS

1. Find two consecutive integers whose sum is 123.
2. Find two consecutive integers whose sum is -97.
3. Find three consecutive integers whose sum is 171.
4. Find three consecutive integers whose sum is -54
5. Find two consecutive even integers whose sum is 54
6. Find two consecutive even integers whose sum is -38
7. Find three consecutive even integers whose sum is 84
8. Find three consecutive even integers whose sum is -48
9. Find two consecutive odd integers whose sum is 128
10. Find two consecutive odd integers whose sum is -36
11. Find three consecutive odd integers whose sum is 75
12. Find three consecutive odd integers whose sum is -45
13. Three consecutive odd integers are such that the sum of the first and the third is 70. Find the integers
14. Three consecutive integers are such that three times the smallest is 14 more than the largest. Find the integers.
15. Three consecutive odd integers are such that the sum of the first and second is 31 less than 3 times the third. Find the integers.
16. Three consecutive even integers are such that the sum of the smallest and 3 times the second is 38 more than twice the third. Find the integers
17. Two consecutive integers are such that 3 times the larger exceeds twice the smaller by 34. Find the integers.

Answers

1. 61, 62	2. -49, -48	3. 56, 57, 58	4. -19, -18, -17	5. 26, 28	6. -20, -18
7. 26, 28, 30	8. -18, -16, -14	9. 63, 65	10. -19, -17	11. 23, 25, 27	12. -17, -15, -13
13. 33, 35, 37	14. 8, 9, 10	15. 21, 23, 25	16. 20, 22, 24	17. 31, 32	