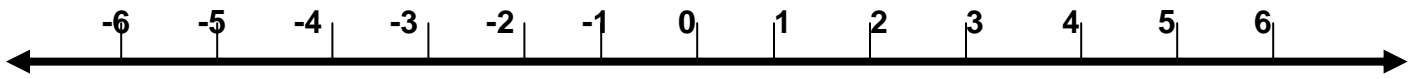


**2.5b – PROBLEM SOLVING - CLASSWORK**

- 1. A number is doubled and then increased by three. The result is eighty-one. What is the original number?**
- 2. When six is subtracted from the quotient of a number and three, the result is 11. What is the original number?**
- 3. Four less than twice a number is the same as the product of four and the number. Find the number.**
- 4. If you triple a number and then subtract 27, you get three-fourths of the original number. What is the original number?**
- 5. If a number is increased by 17 and that result is then divided by 2, the answer is 10. Find the number.**
- 6. The sum of eight times a number and five is 29. Find the number.**
- 7. Eight times the sum of a number and five is 48. Find the number.**
- 8. The sum of five times some number and two is the same as four times the sum of that number and three. Find the number.**
- 9. The quotient of double a number and five equals the difference of a number and six. Find the number.**



*Consecutive Integers*

*Consecutive Even Integers*

*Consecutive Odd Integers*

**1. The sum of three consecutive integers is 66. Find the integers.**

Algebra	Number
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1st integer =

2nd integer =

3rd integer =

**2. Find three consecutive odd integers such that the sum of the first and third is nine more than the second.**

Algebra	Number
---------	--------

1st integer =

2nd integer =

3rd integer =

**3. Find three consecutive even integers such that triple the last is the same as the first increased by 20.**

Algebra	Number
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1st integer =

2nd integer =

3rd integer =

**4. The average of three consecutive integers is 55. Find the integers.**

**2.5b Homework – Translate to an equation and solve.**

- 1. Seven less than four times a number is 37. What is the number?**
  
- 2. Eight more than the quotient of a number and five gives twelve. Find the number.**
  
- 3. Double a number increased by 11 results in  $\frac{5}{8}$  of the number. Find the number.**
  
- 4. The product of six and a number is the same as the difference of the number and ten. Find the number.**
  
- 5. Five times the sum of 3 and some number is 70. Find the number.**
  
- 6. When fourteen is subtracted from triple a number the result is 22. Find the number.**
  
- 7. Six times the sum of a number and three is the same as the sum of five times a number and 20. Find the number.**
  
- 8. The sum of two consecutive odd integers is 24. Find the integers.**

9. The sum of three consecutive integers is equivalent to eight more than twice the smallest. Find the integers.
10. Find three consecutive even integers such that five times the first is the same as the sum of the second and third.
11. The houses on the south side of Elm Street are consecutive odd numbers. Amy and Beth are next-door neighbors and the sum of their house numbers is 9296. Find their house numbers.
12. The quotient of triple a number and 4 is one more than the number.

**Odd Answers**

- |  |  |                                |                                    |
|--|--|--------------------------------|------------------------------------|
| 1. $4n - 7 = 37$<br>$n = 11$                                     | 3. $2n + 11 = \frac{5}{8}n$<br>$n = -8$            | 5. $5(3 + n) = 70$<br>$n = 11$ | 7. $6(n + 3) = 5n + 20$<br>$n = 2$ |
| 9. $n + n + 1 + n + 2 = 2n + 8$<br>$n = 5, n + 1 = 6, n + 2 = 7$ | 11. $n + n + 2 = 9296$<br>$n = 4647, n + 2 = 4649$ |                                |                                    |