

8.10 Quadratic Integer Problems

----- **Examples** -----

1) If the square of a negative number is decreased by 8, the result is twice the number. Find the number.

2) The product of two consecutive integers is 20. Find the integers.

----- **Classwork** -----

3) The square of a positive number is increased by five times the number, the result is 36. What is the value of the number?

4) The square of a negative number is decreased by 18, the result is 3 times the number. What is the number?

- 5) The product of two consecutive even integers is 48. Find the integers.
- 6) The sum of the squares of two consecutive positive odd integers is 202. Find the integers.
- 7) Find three consecutive positive integers such that the square of the first increased by twice the second is 3 less than four times the third.
- 8) Given two consecutive positive odd numbers, it turns out that the square of the smaller minus 5 times the larger is 26, What is the sum of the integers.