Elementary Algebra Skill

Setting Up and Solving Number Problems

1. The sum of 2 and four times a number is equal to 5 less than three times the number. What is the number?

2. Three times the difference of a number and 7 is the same as five times the sum of the number and 3. Find the number.

3. The sum of the squares of two consecutive integers is 25. Find the integers.

4. The product of two consecutive odd integers is 35. Find the integers.

5. Five times the square of a number added to thirteen times the number gives 6. Find the number(s).

6. The reciprocal of a number less the reciprocal of four times a number yields $1/4$. Find the number.

7. 1 added to the square root of the sum of a number and 6 gives 5 less than the number. Find the number.

8. Twice the cube of a number yields eight times the number. Find the number(s).

9. Twice a number added to a second number gives 2. The second number is 8 more than the first number. Find the numbers.

10. A number plus four times a second number is equal to -8. Three times the first minus two times the second gives 18. Find the numbers.

Answers to Setting Up and Solving Number Problems

1. -7

2. -18

3. 3 and 4; -4 and -3

4. 5 and 7; -7 and -5

5. -3 or $2/5$

6. 3

7. 10

8. 0, -2, or 2

9. -2 and 6

10. 4 and -3