

**Solve the equation.**

1.  $x^2 = -64$

2.  $x^2 + 7x - 18 = 0$

3.  $x^2 + 5 = 14$

4.  $x^2 = -12$

5.  $2x^2 - 6x = 15 - 5x$

6.  $11x^2 + 1 = 2x^2$

7.  $4x^2 - 7x + 5 = 3x^2 - 7$

8.  $x^2 - 16 = 5x^2$

9.  $27x^2 - 18x + 3 = 0$

10.  $3(x + 5)^2 + 147 = 0$

11.  $-2(x + 1)^2 = 72$

12.  $3(x - 4)^2 + 6 = 0$

**Write the expression as a complex number in standard form:  $a + bi$**

13.  $(3 + 2i) + (-5 + 8i)$

14.  $(-2 - 4i) + (3 - 6i)$

15.  $(5 - 8i) - (2 + 9i)$

16.  $(5 - 4i)(3 + 6i)$

17.  $(2 + 5i)^2$

18.  $(4 + 8i)(4 - 8i)$

19.  $2(2 + i) + (1 - i)^2$

20.  $(1 - 5i)(2 + i) - i(3 - 4i)$