Solving Equations 14
Geometry

Solve, check, and graph the following equations.

1) $60 = -x + 7x$

$x = 10$

2) $-89 = -7 + 3x - 11x - 26$

$-89 = -8x - 33$

$+33 \quad +33$

$-56 = -8x$

$-8 \quad -8$

$x = 7$

✓ $-89 = -7 + 3(7) - 11(7) - 26$

$-89 = -7 + 21 - 77 - 26$

$-89 = -89$ ✓

0 7

3) $11x = -28 + 9x$

$x = -14$

4) $-x + 11 = 5x - 7$

$x = 3$

5) $-7(-9 - 4x) = 147$

$63 + 28x = 147$

$-63 \quad -63$

$28x = 84$

$28 \quad 28$

$x = 3$

✓ $-7(-9 -4(3)) = 147$

$-7(-9 - 12) = 147$

$-7(-21) = 147$

$147 = 147$ ✓

0 3

6) $9(2x + 6) = -90$

$x = -8$

7) $-4(6x + 5) = -20x + 16$

$-24x - 20 = -20x + 16$

$+ 24x \quad + 24x$

$-20 = 4x + 16$

$-16 \quad -16$

$-36 = 4x$

$4 \quad 4$

$x = -9$

8) $66 = -3x^2 - 9$