

4.6A Solving by Square Roots

Period _____

Solve each equation by taking square roots. YOU MUST SIMPLIFY THE RADICALS WHEN POSSIBLE.

1) $-5 - 4a^2 = -85$

2) $8r^2 - 8 = 232$

3) $8x^2 - 7 = 593$

4) $4r^2 + 8 = 368$

5) $(a - 4)^2 = 25$

6) $8(x + 1)^2 = 8$

7) $-2(x + 6)^2 = -16$

8) $2(2k + 5)^2 + 3 = 7$

9) $7(2x + 5)^2 + 6 = 13$

10) $-3(2x - 7)^2 + 13 = -14$

$$11) 4(x - 2)^2 - 6 = -2$$

$$12) -2(3m - 6)^2 + 5 = -13$$

$$13) (n + 4)^2 - 25 = 24$$

$$14) (2m + 1)^2 + 3 = 7$$

$$15) 4(x - 4)^2 = 1$$

$$16) 25(x - 1)^2 + 1 = 17$$

$$17) 100(n + 1)^2 - 3 = 22$$

$$18) 6(n + 3)^2 - 4 = 104$$

$$19) 4(n - 4)^2 + 3 = 16$$

$$20) 16(n - 1)^2 - 3 = 6$$