4.6B Solving with Square Roots

Period____

Solve each equation by taking square roots. You must simplify your radicals.

1) $x^2 = 1$

2) $r^2 = 36$

3) $r^2 = 0$

4) $x^2 = 60$

5) $n^2 = 91$

6) $p^2 = 96$

7) $n^2 = 60$

8) $x^2 = 27$

9) $x^2 = 18$

10) $k^2 = 72$

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

11) $9r^2 + 8 = 242$

12) $49x^2 - 5 = 31$

13) $16p^2 + 6 = 55$

14) $2 + 4b^2 = 66$

15) $-5 - 4a^2 = -85$

16) $8x^2 - 7 = 593$

17) $4r^2 + 8 = 368$

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

19) $8(x + 1)^2 = 8$

20) $2(2k + 5)^2 + 3 = 35$

21) $-3(2x - 7)^2 + 13 = -14$

22) $-2(x + 6)^2 = -12$

23) $7(x + 5)^2 + 6 = 62$

24) $-2(2x - 7)^2 + 39 = -61$

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

26) $(2m+1)^2 + 3 = 35$

27) $5(x-1)^2 + 1 = 76$

28) $100(n+1)^2 - 3 = 22$

29) $16(n+3)^2 + 4 = 104$

30) $4(n-4)^2 + 3 = 28$