Secondary Math 2 Name_____

4.2 Solving with Square Roots

Date_____ Period____

1) What in the problems above tell you that we need to use a square root to solve?

2) Why do we get two solutions for the questions above?

Solve each equation.

3) $2x^2 + 8 = 16$

4) $64x^2 + 7 = 71$

5) $7x^2 - 8 = 300$

6) $3m^2 + 5 = 98$

7) $1 - 6k^2 = -95$

8) $5x^2 - 1 = 429$

Solve each equation.

9) $(x + 4)^2 = 16$

10) $(x - 3)^2 = 64$

11) $(x - 10)^2 = 169$

12) $(x + 37)^2 = 120$

13) $5(x + 7)^2 = -35$

14) $2(x + 12)^2 = -90$

15) $(x-4)^2+10=110$

16) $(x+8)^2+15=60$

17) $5(x-7)^2+8=33$

18) $2(x+1)^2+23=17$

19) $5(x-2)^2+5=-20$

20) $3(x-35)^2-6=15$

21) When can you tell if you'll have rational, irrational, or imaginary solutions?

22) Can you have an imaginary solution to $y=x+5$? Why or why not?