Solving Square Root Equations Name: _____

1) $\sqrt{x} + 9 = 15$

2) $\sqrt{y - 8} + 5 = 7$

3) $\sqrt{3x + 4} - 2 = 8$

4) $5 - \sqrt{9 - 4x} = 8$

5) $(3z + 4)^{1/2} = 5$

6) $\sqrt{5w + 3} = \sqrt{4w + 5}$

7) $\sqrt{p+16}+4=p$

8) $\sqrt{m-1}+5=m-2$

9) $(3n+10)^{1/2}=n+4$

10) $\sqrt{10-13r}=r-4$

Explain the Error

11) Below is a student's work in solving the equation $2\sqrt{3x+3}=\sqrt{x+4}$. What mistake did the student make? What is the correct solution?

$\left(2\sqrt{3x+3}\right)^2=\left(\sqrt{x+4}\right)^2$
$2(3x+3)=x+4$
$6x+6=x+4$
$5x=-2$
$x=-2/5$