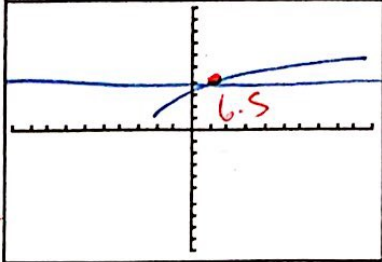
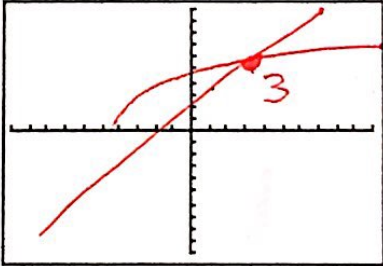
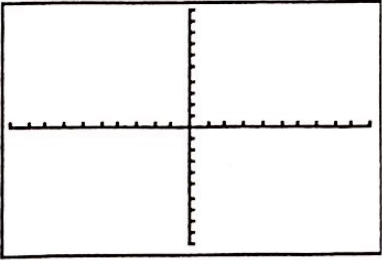


LAB: Practice Radical Equations  
Use the Graphing Calculator

Name Bagaasen

<p>1. Solve algebraically:</p> $4 = \sqrt{2x+3}$ $16 = 2x+3$ $\begin{array}{r} -3 \\ -3 \end{array}$ $13 = 2x$ $x = \frac{13}{2} = 6.5$	<p>Check(s):</p> $4 = \sqrt{\frac{13}{2} \cdot 2 + 3}$ $4 = \sqrt{13+3}$ $4 = \sqrt{16}$ $4 = 4 \quad \checkmark$	<p>Graph each side of the equation. Label the intersection(s).</p> 
<p>2. Solve algebraically:</p> $x+2 = \sqrt{3x+16}$ $x^2+4x+4 = 3x+16$ $x^2+x-12=0$ $(x-3)(x+4)$ $x = -4(3)$	<p>Check(s):</p> $-4+2 = \sqrt{-4 \cdot 3 + 16}$ $-2 = \sqrt{-12+16}$ $-2 = \sqrt{4}$ $-2 = 2 \quad \times$ <hr/> $3+2 = \sqrt{3 \cdot 3 + 16}$ $5 = \sqrt{9+16}$ $5 = \sqrt{25}$ $5 = 5 \quad \checkmark$	<p>Graph each side of the equation. Label the intersection(s).</p> 

<p>3. Solve algebraically:</p> $x - \sqrt{x+4} = 2$ $x - 2 = \sqrt{x+4}$ $x^2 - 4x + 4 = x + 4$ $x^2 - 5x = 0$ $x(x-5) = 0$ $x = 0, 5$	<p>Check(s):</p> $0 - \sqrt{0+4} = 2$ $-\sqrt{4} = 2$ $-2 = 2 \quad \times$ <hr/> $5 - \sqrt{5+4} = 2$ $5 - \sqrt{9} = 2$ $5 - 3 = 2$ $2 = 2 \quad \checkmark$	<p>Graph each side of the equation. Label the intersection(s).</p> 
<p>4. Solve algebraically:</p> $x - 1 = \sqrt{x+5}$ $x^2 - 2x + 1 = x + 5$ $x^2 - 3x - 4 = 0$ $(x-4)(x+1)$ $x = -1, 4$	<p>Check(s):</p> $4 - 1 = \sqrt{4+5}$ $3 = \sqrt{9}$ $3 = 3 \quad \checkmark$ <hr/> <del> <math display="block">-1 - 1 = \sqrt{-1+5}</math> <math display="block">-2 = \sqrt{4}</math> <math display="block">-2 = 2 \quad \times</math> </del>	<p>Graph each side of the equation. Label the intersection(s).</p> 