Radical Equations

Nested Radicals

1. $\sqrt{2\sqrt{7x+2}} = \sqrt{4x+2}$

2. $\sqrt{\sqrt{x+36}} = \sqrt{x+6}$

3. $\sqrt{2\sqrt{7x+8}} = \sqrt{2x+4}$

4. $\sqrt{2\sqrt{3x+3}} = \sqrt{2x+2}$

5. $\sqrt{1+4\sqrt{x}} = \sqrt{x}+1$

6. $\sqrt{\sqrt{x+9}} = \sqrt{x+3}$

7. $\sqrt{2\sqrt{5x+5}} = \sqrt{2x+2}$

8. $\sqrt{2\sqrt{x+2}} = \sqrt{x+2}$

9. $\sqrt{8+2\sqrt{x}} = \sqrt{x}$

10. $\sqrt{2\sqrt{2x+3}} = \sqrt{x+3}$

Answers

Radical Equations

Nested Radicals

1. $x = 1, x = -\dfrac{1}{4}$

2. $x = 0$

3. $x = 4, x = -1$

4. $x = 2, x = -1$

5. $x = 4, x = 0$

6. $x = 0$

7. $x = 4, x = -1$

8. $x = 2, x = -2$

9. $x = 16$

10. $x = 3, x = -1$