

1.4 Radical Equations WS 2

Date _____ Period _____

Find all roots.

1) $x^3 - 125 = 0$

2) $x^4 - 2x^3 - 3x^2 + 6x = 0$

3) $x^3 - 4x^2 + 2x - 8 = 0$

4) $x^4 - 5x^2 - 6 = 0$

Solve each equation. Remember to check for extraneous solutions.

5) $\frac{x-4}{x^2} - \frac{1}{x^2} = \frac{1}{2x^2}$

6) $\frac{1}{n^2} = \frac{1}{5n^2} + \frac{2}{5n}$

7) $\frac{3p}{p+5} - \frac{5p^2+3p-2}{p^2-p-30} = 1$

8) $\frac{x^2+7x+6}{x^2+7x+12} = 1 + \frac{6x+36}{x+3}$

9) $\sqrt{5n-4} = n-2$

10) $\sqrt{6+5a} = a$

11) $\sqrt{9-v} = 2 - \sqrt{2v+6}$

12) $\sqrt{7b-3} - 4 = \sqrt{9-2b}$