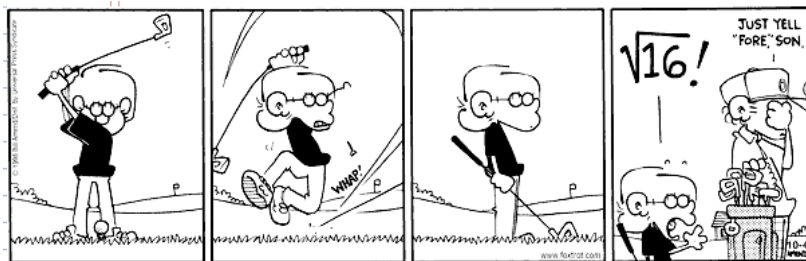


# Algebra II Honors Ch 3 HW Syllabus\*

| Day | Date | Description   | Homework  |
|-----|------|---|---|
| 1   |      | 3.1 Evaluate nth Roots and Use Rational Exponents<br><br>3.2 Properties of Rational Exponents                                 | <ul style="list-style-type: none"> <li>p.169 (1, 3-6 all, 7-13 odd, 21-33 odd, 47, 49)</li> <li>p. 176 (1, 15, 19, 20, 21, 23, 28, 33, 36, 37, 68, 69)</li> <li>p. 179 (9, 12)</li> <li><b>SET A</b></li> </ul> |
| 2   |      | 3.2 Properties of Rational Exponents – <i>Simplifying Radical Expressions Involving Variables</i>                             | <ul style="list-style-type: none"> <li>3.2 &amp; 3.3 WKST (1, 2, 3)</li> </ul>  |
| 3   |      | <b>Quiz: 3.1-3.2</b><br><br>3.3 Function Operations and Compositions – <i>Operations, Compositions</i>                        | <ul style="list-style-type: none"> <li>Function Compositions Worksheet (1-4)</li> </ul>   |
| 4   |      | 3.3 Function Operations and Compositions – <i>Domain of Compositions</i><br><br>3.5 Graph Square Root and Cube Root Functions | <ul style="list-style-type: none"> <li>Function Compositions Worksheet (5-6)</li> <li>p. 201 (2, 17-23 odd, 27, 31, 33)</li> <li>Set B</li> </ul>   |
| 5   |      | <b>Quiz: 3.3, 3.5</b><br><br>3.4 Inverse Functions  | <ul style="list-style-type: none"> <li>Inverse Functions WKST – Part I</li> </ul>   |
| 6   |      | 3.4 Inverse Functions   | <ul style="list-style-type: none"> <li>Inverse Functions WKST – Part II</li> </ul>  |
| 7   |      | 3.6 Solving Radical Equations   | <ul style="list-style-type: none"> <li>p. 208 (1, 2, 7-31 eoo, 33-39 odd, 44, 46, 47)</li> <li>p. 219 (26, 27, 29)</li> <li>p. 225 (6, 9, 10-16 all, 20)</li> </ul>   |
| 8   |      | <b>Quiz: 3.4-3.6</b><br><br>Ch 3 Review   | Ch 3 Review Worksheet   |
| 9   |      | <b>Ch 3 Test</b>  | <b>*SPIRAL ASSIGNMENT 2</b>   |

\*This syllabus is subject to change.



| SET A  | SET B   |
|--|---|
| 1. Simplify each radical expression.<br>a) $\frac{-3}{\sqrt[4]{8}}$<br>b) $10(\sqrt[3]{54})^{-1}$<br>c) $\sqrt[5]{\frac{12}{256}}$ | 1. Sketch the graph, then state the domain and range in interval notation.<br>a) $y = \sqrt{2x+6} - 4$<br>b) $y = 5 - \sqrt[3]{5x+10}$<br>c) $y = -3\sqrt{2-x} + 6$ |

SET ANSWERS

SET A

1.

a)  $\frac{-3\sqrt[4]{2}}{2}$

b)  $\frac{5\sqrt[3]{4}}{3}$

c)  $\frac{\sqrt[5]{48}}{4}$

SET B

1.

a)  $2|x|\sqrt{73}$

b)  $2xy^2\sqrt[4]{8x^3y^2}$

c)  $-2ab^2\sqrt[3]{2b^2}$

d)  $2x|y|\sqrt[6]{7xy^2}$

e)  $2x^2|y|$

f)  $2x^2y\sqrt[4]{3y^3}$

2.  $\sqrt[4]{80m^5n^6}$

3.

a) 3.5

b) -2

c) 0

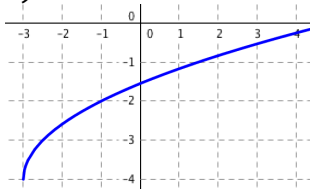
d) undefined

e) 1/3

SET C

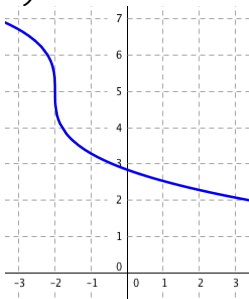
1.

a)



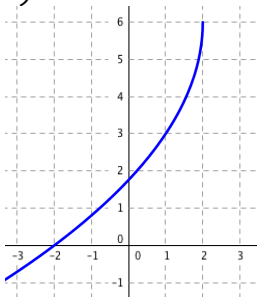
D:  $[-3, \infty)$ , R:  $[-4, \infty)$

b)



D:  $(-\infty, \infty)$ , R:  $(-\infty, \infty)$

c)



D:  $(-\infty, 2]$ , R:  $(-\infty, 6]$