Name: _____

Square Roots and Powers

Topic	Description, Classwork, Homework
Introduction P 146	Explore and Inquire Activities
Square Roots Section 3.12 P146-151	**P149 Classwork:** 1-17, 37, 39, 41, 47, 52, 53, 59a, c, 60a, c, e, h, 61a, 62a, b, 63, 64a, 68a **P149 Homework:** 43-46, 48, 50, 54, 55, 59d, f, 60b, d, f, g, i, 61b, 62c, d, 64b, d, 65, 66, 68c
Use Logic/Problem Solving Section 2.9 P86-87	**Read P86** **P87 Classwork:** 1 **P87 Homework:** 2-12
Exponents, Powers and Variables Section 1.4 P14-16	**P15 Classwork:** 1, 2, 5, 10, 11, 13, 15, 17, 19, 34, 36, 40, 49, 57 **P15 Homework:** 3, 4, 6, 9, 12, 14, 16, 18, 22, 41, 50, 51, 52, 53, 54, 55, 58, 59, 60, 61(all), 62(all)
The Exponent Rules Section 1.5 P17-18	**P18 Classwork:** 1, 3, 5, 10, 12, 18, 20, 22, 27, 29, 33, question at bottom a) **P18 Homework:** 2, 4, 6, 7, 8, 9, 11, 14, 19, 21, 23, 28, 30, 31, 32, 34, 38, 39, 40, question at bottom b, c, d, e, f
Use a Diagram/ Problem Solving Section 3.8 P134-135	**Read P134** **P134 Homework:** 1-11 (Work on these whenever you have time)
Zero and Negative Exponents Section 3.2 P108-112	**P111 Classwork:** 1, 3, 8, 13, 16, 20, 26, 28, 29, 32, 34, 36, 39, 41, 43, 46, 49, 51, 52, 55, 56, 57, 58, 62, 65, 67, 68, 72, 76, 78, 80, 84, 88, 90e, f, j, 92c, f **P111 Homework:** 2, 4, 5, 6, 7, 14, 15, 17, 18, 21, 22, 23, 24, 25, 30, 31, 33, 35, 37, 38, 40, 42, 44, 45, 47, 48, 50, 53, 54, 59, 60, 61, 63, 64, 69, 70, 71, 73, 74, 75, 77, 79, 81, 82, 83, 85, 86, 87, 90a, b, c, d, g, h, i, 91(all), 92a, b, d, e
Scientific Notation Section 3.3 P113	**P115 Classwork:** 1, 2, 3, 4, 7, 9, 17, 19, 21, 26 **P115 Homework:** 8, 10, 11, 12, 13, 14, 15, 16, 18, 20, 22

The exponent rules can be applied to powers with fractional bases.

$$\left(\frac{1}{2}\right)^3 = \left(\frac{1}{2}\right)\left(\frac{1}{2}\right)\left(\frac{1}{2}\right) \qquad \left(\frac{-1}{2}\right)^3 = \left(\frac{-1}{2}\right)\left(\frac{-1}{2}\right)\left(\frac{-1}{2}\right)$$

$$= \left(\frac{1}{8}\right) \qquad\qquad\qquad = \left(\frac{-1}{8}\right)$$

Use the rules to evaluate the following.

a) $\left(\frac{-2}{3}\right)^5$
b) $\left(\frac{11}{2}\right)^4$
c) $\left(\frac{-3}{2}\right)^3$

d) $4\left(\frac{-1}{2}\right)^2$
e) $\left(\frac{1}{2}\right)^2\left(\frac{-1}{2}\right)^3$
f) $\left(\frac{-1}{4}\right)^2 - 1$