



Name: _____ Date: _____ Period: _____

Radicals

Simplifying, Adding & Subtracting, Multiplying, & Dividing (including rationalizing the denominator)

1	2	3
4	5	6
7	8	9
10	11	12
13	14	15
16	17	18

Radicals

Simplifying, Adding & Subtracting, Multiplying, & Dividing (including rationalizing the denominator)

1	$\sqrt{75}$ $= 5\sqrt{3}$	2	$\sqrt{80}$ $= 4\sqrt{5}$	3	$\sqrt{300x^2}$ $= 10x\sqrt{3}$
4	$\sqrt{28x^3y^2}$ $= 2xy\sqrt{7x}$	5	$\sqrt{63x^7y^3}$ $= 3x^3y\sqrt{7xy}$	6	$-3\sqrt{10} - 11\sqrt{10}$ $= -14\sqrt{10}$
7	$2\sqrt{50} + 7\sqrt{2}$ $= 17\sqrt{2}$	8	$\sqrt{27} + \sqrt{75}$ $= 8\sqrt{3}$	9	$\sqrt{28} + \sqrt{700}$ $= 12\sqrt{7}$
10	$\sqrt{10} \cdot \sqrt{70}$ $= 10\sqrt{7}$	11	$\sqrt{8x} \cdot \sqrt{4x^3}$ $= 4x^2\sqrt{2}$	12	$3\sqrt{8} \cdot 4\sqrt{5}$ $= 24\sqrt{10}$
13	$\sqrt{98xy^3} \cdot \sqrt{5x^4y^2}$ $= 7x^2y^2\sqrt{10xy}$	14	$\frac{\sqrt{81}}{\sqrt{16}}$ $= \frac{9}{4}$	15	$\frac{\sqrt{75}}{\sqrt{x^6}}$ $= \frac{5\sqrt{3}}{x^3}$
16	$\frac{\sqrt{20}}{\sqrt{36x^2}}$ $= \frac{\sqrt{5}}{3x}$	17	$\frac{20}{\sqrt{5}}$ $= 4\sqrt{5}$	18	$\frac{\sqrt{75}}{\sqrt{x^6}}$ $= \frac{2\sqrt{6x}}{3x}$

Directions:

Print pages 1 & 2 for each set of students (I usually have my students work in groups of 2 or 3). Every student will also need a copy of the recording sheet (page 3). You may choose to just have students work out all of the problems on a sheet of white lined paper. I use the recording sheet to help with organization, accountability, and for easy grading.

Students will solve all of the problems, cut out the pieces, and arrange them to create the figure below. The pieces fit together so that the problem and its solution face one another along an edge.

