

### 5-1 Partner Problems

Work the problems in your column. For each problem number, your answer should match your neighbor's answer. Answer without a calculator, but you'll probably want to reference your Power Table

	Partner 1		Partner 2
1	Simplify: $\sqrt[3]{x^{12}}$	1	Simplify: $\sqrt[5]{x^{20}}$
2	Simplify: $\sqrt[6]{64x^{18}y^{24}}$	2	Simplify: $\sqrt[4]{16x^{12}y^{16}}$
3	Solve. Find all real solutions $x^3 = 64$	3	Solve. Find all real solutions $x^5 = 1024$
4	Solve. Find all real solutions $3x^6 - 2 = 2185$	4	Solve. Find all real solutions $2x^4 + 1 = 163$
5	Find all real 5 <sup>th</sup> roots of 7776	5	Find all real 7 <sup>th</sup> roots of 279, 936
6	Find all real 6 <sup>th</sup> roots of 262,144	6	Find all real 4 <sup>th</sup> roots of 4096
7	Evaluate: $\sqrt[4]{144^2}$	7	Evaluate: $\sqrt[6]{1728^2}$
8	Approximate using a calculator: $\sqrt[6]{361}$	8	Approximate using a calculator $\sqrt[3]{19}$