1 What is the normal thing that happens when we square a number: does it get bigger or smaller?

2 Square 0.1. What happened?

3 What is the normal thing that happens when we square root a number: does it get bigger or smaller?

4 What is the cube root of 0.64? What happened?

5 Let us reconsider the problems we have been solving as powers. On what interval is x2 < x?

6 Did you answer include negatives? Rewrite your answer using absolute values.

7 Solve for the interval where x1/3 > x. Write your answer using absolute values.

8 Let us consider how to graph any power function y= x^(m/n). Begin by thinking about m. Any number to an even power has what sign?

9 Next, consider n. What are even roots of negative numbers?

10 Suppose we had f(x)=x^(5/3). How could we find a lattice point? Roots are harder than power, so what is the easiest number after 1 to cube root? What is that number to the fifth? Write your answer as two lattice point on the graph of f(x), one in the first quadrant, one in the fourth.

11 Are you two point “over” more than they are “up”? In other words, how will |f(x)| compare to y=|x|?

12 Create a list of criteria to evaluate the graph of any power function, if you had to do so by hand.

13 Describe what you think the point of this problem set is, in technical language.