Name: _____ Date: _____

Learning Goal 4.1	Identify and order irrational numbers.

Take a moment. What distinguishes these sets of numbers? What does each grouping have in common with each other? How are they different from the other group? Add **three** more values to each group

0.5 $\sqrt[5]{-32}$ $\sqrt[3]{8}$ $\sqrt{\frac{9}{64}}$ $\sqrt{100}$ $\sqrt{0.25}$ $\frac{5}{6}$ 0.8^2	$\sqrt{2}$ $\sqrt[3]{9}$ π $\sqrt{0.24}$ $\sqrt{\frac{1}{3}}$ $\sqrt[4]{12}$

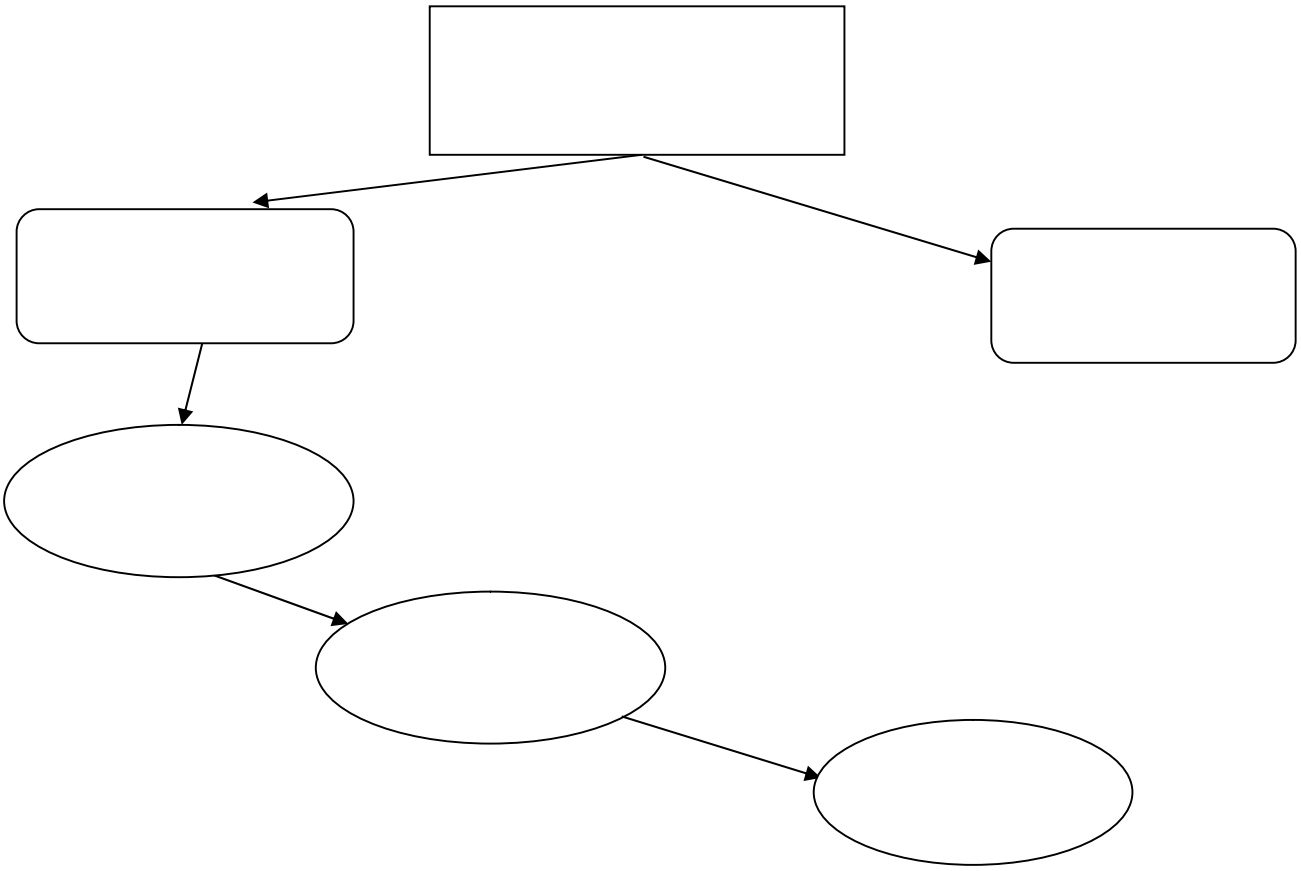
Example Tell whether each number is rational or irrational. Explain.

1. $\sqrt{\frac{49}{16}}$
2. $\sqrt[3]{30}$
3. 1.21

Again! How are these groups different from one another? Add **three values** to each.

10^2 $\sqrt[5]{-1}$ $\sqrt[4]{128}$ $(-8)^3$ $-\sqrt{100}$ $\sqrt[3]{8}$ $\sqrt{\frac{64}{4}}$	0.8^2 0.5 $\frac{1}{2}$ $\sqrt{0.25}$ $\sqrt{\frac{1}{9}}$ $\sqrt[3]{\frac{64}{27}}$

Types of Numbers



Example Use a number line to order these numbers least to greatest.

$$\sqrt{2}, \sqrt[3]{-2}, \sqrt[3]{6}, \sqrt{11}, \sqrt[4]{30}$$