Unit 1 Test Review

Take out HW #8 for me to check off

Complete the following tables using exact values (no decimals).

+	5	$1/2$	0	$\sqrt{2}$	$-\sqrt{2}$	π
5	10	$11/2$	5	$5+\sqrt{2}$	$5-\sqrt{2}$	$5+\pi$
$1/2$	$\frac{11}{2}$ or $5\frac{1}{2}$	1	$\frac{1}{2}$	$\frac{1}{2}+\sqrt{2}$	$\frac{1}{2}-\sqrt{2}$	$\frac{1}{2}+\pi$
0	5	$1/2$	0	$\sqrt{2}$	$-\sqrt{2}$	π
$\sqrt{2}$	$5+\sqrt{2}$	$\sqrt{2}+1/2$	$\sqrt{2}$	$2\sqrt{2}$	0	$\sqrt{2}+\pi$
$-\sqrt{2}$	$5-\sqrt{2}$	$-\sqrt{2}+1/2$	$-\sqrt{2}$	0	$-2\sqrt{2}$	$-\sqrt{2}+\pi$
π	$5+\pi$	$\pi+1/2$	π	$\pi+\sqrt{2}$	$\pi-\sqrt{2}$	2π

rational

irrational

X	5	$1/2$	0	$\sqrt{2}$	$1/\sqrt{2}$	π
5	25	$5/2$	0	$5\sqrt{2}$	$5/\sqrt{2}$	5π
$1/2$	$5/2$	$1/4$	0	$\sqrt{2}/2$	$1/2\sqrt{2}$	$\pi/2$
0	0	0	0	0	0	0
$\sqrt{2}$	$5\sqrt{2}$	$\sqrt{2}/2$	0	2	1	$\pi\sqrt{2}$
$1/\sqrt{2}$	$5/\sqrt{2}$	$1/2\sqrt{2}$	0	1	$1/2$	$\pi/\sqrt{2}$
π	5π	$\pi/2$	0	$\pi\sqrt{2}$	$\pi/\sqrt{2}$	π^2

$$\sqrt{2} \cdot \sqrt{2} = \sqrt{4} = 2$$

Based on the information from your chart, conjecture which of the statements is ALWAYS true, which is SOMETIMES true, and which is NEVER true.

- The sum of a rational number and a rational number is rational. ALWAYS
- The sum of a rational number and an irrational number is irrational. ALWAYS
- The sum of an irrational number and an irrational number is irrational. SOMETIMES
- The product of a rational number and a rational number is rational. ALWAYS
- The product of a rational number and an irrational number is irrational. SOMETIMES

  ONLY WHEN THE RATIONAL NUMBER IS ZERO, WILL THE PRODUCT BE RATIONAL.
- The product of an irrational number and an irrational number is irrational. SOMETIMES

$\sqrt{2} \cdot \sqrt{2} = \sqrt{4} = 2$

Unit 1 Test Review Worksheet

Answer key is taped to my white board.

It will also get posted to the website today for you to use as a study guide tonight!!