

Unit 1 Test Review

Take out HW #8 for me to
check off

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

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

rational

irrational

x	5	$\frac{1}{2}$	0	$\sqrt{2}$	$\frac{1}{\sqrt{2}}$	π
5	25	$\frac{5}{2}$	0	$5\sqrt{2}$	$\frac{5}{\sqrt{2}}$	5π
$\frac{1}{2}$	$\frac{5}{2}$	$\frac{1}{4}$	0	$\frac{\sqrt{2}}{2}$	$\frac{1}{2}\sqrt{2}$	$\frac{\pi}{2}$
0	0	0	0	0	0	0
$\sqrt{2}$	$5\sqrt{2}$	$\frac{\sqrt{2}}{2}$	0	2	1	$\pi\sqrt{2}$
$\frac{1}{\sqrt{2}}$	$\frac{5}{\sqrt{2}}$	$\frac{1}{2}\sqrt{2}$	0	1	$\frac{1}{2}$	$\frac{\pi}{\sqrt{2}}$
π	5π	$\frac{\pi}{2}$	0	$\pi\sqrt{2}$	$\frac{\pi}{\sqrt{2}}$	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

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!!