

Welcome to ...

Pre-Calculus 110

Housework to get done today...

- Attendance
- Introductions
- Classroom Rules...
 1. Must be on time and prepared with all necessary supplies.
 2. No food or drink during class other than water and a light snack before class.
 3. Must be respectful of all others in the classroom. Someone speaking or intercom in use means EVERYONE else is listening.
- Review emergency evacuation procedures and "code black".
- Pathways of High School Mathematics
- Course Outline

Number Sense and Algebra

Vocabulary of Radicals:

Identify the parts of this radical...

- (1) Coefficient
- (2) Radicand
- (3) Index

Example: $3x^1 \sqrt[3]{25}$

Handwritten annotations for $5\sqrt[3]{6}$:
 - 5 is labeled "Coefficient"
 - 3 is labeled "Index"
 - 6 is labeled "Radicand"

Handwritten calculation: $\sqrt{25} = 5$

- The square root of any real number is positive and is referred to as the principal square root

Any idea of what is meant by a restriction on a radical expression?

- Use the samples below to drive your thoughts...

Radical expressions: \sqrt{x} , $\sqrt{x+7}$, $\sqrt[3]{3x-1}$, $\sqrt[6]{5x^8}$

Restriction: $\{x \mid x \geq 0, x \in \mathbb{R}\}$
 (Note: "such x/any" written below)

Restrictions for $\sqrt{x+7}$: $x+7 \geq 0$
 $x \geq -7$

Restrictions for $\sqrt[3]{3x-1}$: $3x-1 \geq 0$
 $3x \geq 1$
 $x \geq \frac{1}{3}$
 (Note: "No restrictions" written above)

Attachments

Mathematical Pathways Description.docx

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