Math 11 Pre-Calculus LG 9

RADICALS



Radical equations can be used to model a variety of relationships. Check out pages 270-271.



V LEARNING GUIDE EXPECTATIONS:

On the completion of this learning guide you will be able to:

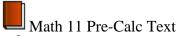
- Convert between entire and mixed radicals.
- 2) Compare and order radicals.
- 3) Add and subtract radicals.
- Multiply and divide radicals. 4)
- Solve radical equations. 5)

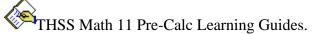


EVALUATION:

You are ready to progress to the next learning guide when you can demonstrate your understanding of the above expectations. Please refer to your Mathematics 11 Pre-Calc Marks Record Sheet to determine the assessment.







LEARNING ACTIVITIES:



Expectation #1: Convert between entire and mixed radicals.

Expectation #2: Compare and order radicals.

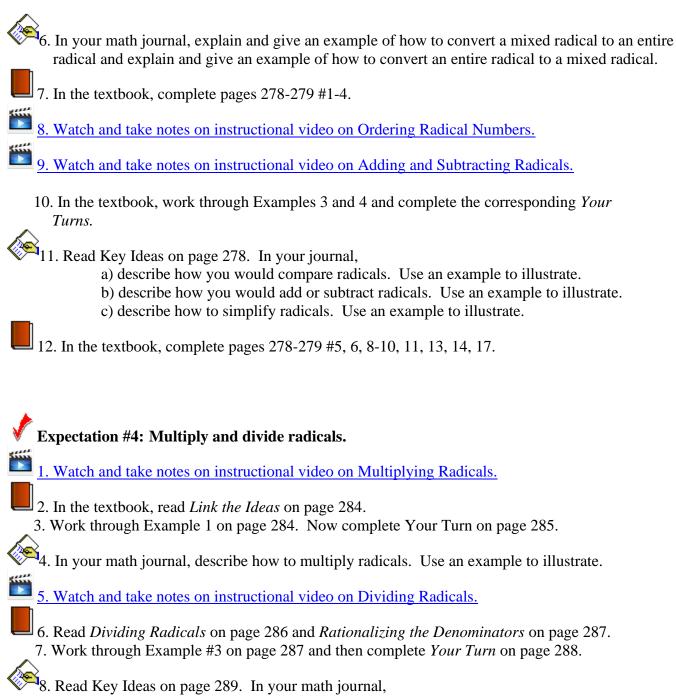
Expectation #3: Add and subtract radicals.



1. Watch and take notes on instructional video on Converting Mixed-Entire Radicals with variables.



- $^{\bot}$ 2. In the textbook, read *Link the Ideas* on page 273.
 - 3. In the textbook, work through Example 1 on page 274. Now complete *Your Turn* on page 274.
- 4. Read *Radicals in Simplest* form on page 274.
- 5. Work through Example 2 on page 275. Now complete *Your Turn* on page 275.



- a) describe how to divide radicals. Use an example to illustrate.
 - b) describe how to rationalize the denominator. Use an example to illustrate.
- 9. In the textbook, complete pages 289-292 #1-12, 13, 14, 15, 16, 20.



Expectation #5: Solve radical equations.



1. Watch and take notes on instructional video on Solving Radical Equations.



2. In the textbook, work through Examples 1-4 on pages 296-299 completing each *Your* Turn for practice.



3. Read *Key Ideas* on page 300. In your math journal, describe how to solve radical equations. Use an example to illustrate.



4. In the textbook, complete pages 300-302 #1-10, 11-14, 21

REVIEW AND CHALLENGE



1. In the textbook, complete Chapter 5 Review pages 304-305 #1-21.

Key Terms: like radicals, mixed radicals, entire radicals, rationalize, conjugate.

PRACTICE QUIZZES

Practice quiz #1

Practice quiz #2

Practice quiz #3

Practice quiz #4