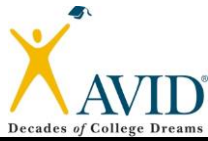


Cornell Notes



Topic: M7 L5 Solving Equations with Radical Notes

8.EE.A.2: Use square root and cube root symbols to represent solutions to equations of the form $x^2 = p$ and $x^3 = p$, where p is a positive rational number. Know that $\sqrt{2}$ is irrational.
a. Evaluate square roots of perfect squares less than or equal to 225.
b. Evaluate cube roots of perfect cubes less than or equal to 1000.

Name:

Class/Period:

Date:

Learning Target: I can [ML(1)]

Questions:

Notes:

Example 1

$$x^3 + 9x = \frac{1}{2}(18x + 54)$$

Questions:	Notes:
	Example 2
	$x(x - 3) - 51 = -3x + 13$

M7 L5 Classwork

Partner A Name: _____ Partner B Name: _____ Cohort: _____

Partner A do odd number questions

Partner B do even number questions

Exercises

Find the positive value of x that makes each equation true, and then verify your solution is correct.

1.

a. Solve $x^2 - 14 = 5x + 67 - 5x$.

b. Explain how you solved the equation.

2. Solve and simplify: $x(x - 1) = 121 - x$

M7 L5 Classwork

Partner A Name: _____ Partner B Name: _____ Cohort: _____

Partner A do odd number questions

Partner B do even number questions

3. A square has a side length of $3x$ inches and an area of 324 in^2 . What is the value of x ?

4. $-3x^3 + 14 = -67$

5. $x(x + 4) - 3 = 4(x + 19.5)$

6. $216 + x = x(x^2 - 5) + 6x$

M7 L5 Solving Equations with Radicals Exit Ticket

Name: _____ Cohort: _____

1. Find the positive value of x that makes the equation true, and then verify your solution is correct.

$$x^2 + 4x = 4(x + 16)$$

2. Find the positive value of x that makes the equation true, and then verify your solution is correct.

$$(4x)^3 = 1728$$