

Unit 1 - Rational and Irrational Numbers

You Must Take a Pre-Assessment

This Unit Involves These Standards:

AFA5: Order of Operations with Exponents: Understands how to use exponents to evaluate numerical expressions.

NQN4: Rational Numbers: Is skilled at adding, subtracting, multiplying and dividing rational numbers.

NQN5: Understand the rules of exponents (i.e power of product, product of a power). Understand the relationship between multiplication and positive exponents. Understand the relationship between division and negative exponents.

NSF14: Proportions: Is skilled at using proportional relationships to solve problems.

NSF13: Percents: Is skilled at finding the percent of a quantity.

Click each standard for practice questions!

Levels of Learning

Level 1 (Progressing) -



Level 2 (Basic) -



Level 3 (Proficient) -



Level 4 (Advanced) -



R.1 Functions and Function Notation

Choose 3

No calculators are allowed for this section!!

Video (Original and Retake) 4/4 = A 3/4 = B	In-Class Activity with Mr. Schmidt	IXL - Z.15 (8th) and Z.16 (8th)	Engage NY Lesson 10 Lesson 11 Each is worth 1
	IXL - Z.8 (8th) , Z.9 (8th) , and Z.10 (8th)		

R.2 Reviewing Fraction Computation

Choose 3

No calculators are allowed for this section!!

Choosing Review Videos (Talk to Mr. Schmidt)	Mixed Numbers Worksheets - <u>ALL WORK MUST BE TURNED IN</u> PDF 1 and PDF 2	IXL - E.2 (8th) and E.5 (8th)	IXL - E.3 (8th) and E.6 (8th) Three ribbons on each is worth 2
IXLs (all 3) G.2 (7th) G.9 (7th) G.12 (7th) Three ribbons on each is worth 2		PDF 1 1 - 14 ONLY AND PDF 2 EVENS ONLY	

R.3 Rational Number Computation

Choose 3

No calculators are allowed for this section!!

IXL - E.8 (7th) and M.1 (7th) Decimal Computation Practice	Rational Number Computation PDF 1 and PDF 2 Show all work	IXL - E.9 (8th) and B.6 (Algebra I)	IXL - B.7 (Algebra I)
IXL - C.3 (8th) B.1 (Algebra I) Integer Computation Practice	Multiplying and Dividing Rational Numbers PDF	Mixed Operations with Rational Numbers PDF	

Quiz R.1 - R.3

Must score an 80% or above to not retake!

R.4 Proportions

Choose 3

Video (Original and Retake) 4/4 = A 3/4 = B	IXL - C.5 (Alg I) and C.6 (Alg I)	Impossible Problems	Action Figure Project This is worth 2 boxes.
Prodigy Game 25 questions (Worth 1) 50 questions (Worth 2) YOU MUST SPEAK TO MR. SCHMIDT FIRST	Height Vs Shadow Doing as a class	Solving Proportions PDF You must create and solve a proportion for EVERY problem.	Proportions with Distributive Property

R.5 Conversions

Choose 3

Video (Original and Retake) 4/4 = A 3/4 = B	IXL - E.1 (Alg I), E.2 (Alg I), and E.3 (Alg I) 2 IXLs = 1 box 3 IXLs = 2 boxes	Algebra I Textbook Pg 146 1 - 12 AND 32 - 43	Conversions Worksheet 1 - 30
		Conversions Worksheet	

R.6 Percentages Choose 3			
Video (Original and Retake) 4/4 = A 3/4 = B	IXL - D.2 (Alg I) , D.3 (Alg I) , and D.6 (Alg I) 2 IXLs = 1 box 3 IXLs = 2 boxes	Algebra I Textbook Pg 166 - 167 1 - 14 SKIP Question 13	Algebra I Textbook Pg 171 - 172 9 - 14, 30 - 44 SKIP 41 90% or above on the first try is worth 2
IXL - J.1 (8th) , J.2 (8th) , and J.5 (8th) 2 IXLs = 1 box 3 IXLs = 2 boxes	Prodigy Game 25 questions (Worth 1) 50 questions (Worth 2) YOU MUST SPEAK TO MR. SCHMIDT FIRST	IXL - D.4 (Alg I) , D.5 (Alg I) , and D.6 (Alg I) 2 IXLs = 1 box 3 IXLs = 2 boxes	IXL - D.7 (Alg I) and D.8 (Alg I) 3 ribbons on both is worth 2

Quiz R.4 - R.6

Must score an 80% or above to not retake!

This assignment is required
before you start R.7!

Definitions of Rational and Irrational Numbers Video

- You are required to take notes and show those notes to Mr. Schmidt to get credit for this video.

R.7 Square Roots and Exponents

Choose 4

Both Red Boxes are Required

Video (Original and Retake) 4/4 = A 3/4 = B	IXLs F.3 (8th) F.7 (8th)	IXLs F.4 (8th) X.8 (8th)	Problems 53 - 70 on this PDF ALL WORK MUST BE WRITTEN OUT
Square and Cubed Roots PDF	Prodigy Game 25 questions (Worth 1) YOU MUST SPEAK TO MR. SCHMIDT FIRST	Textbook Algebra I Pg 178 2 - 38 even	Roots and Exponents Practice 1 - 20 = 1 box 21 - 40 = 1 box 41 - 60 = 1 box

These assignments are required
before you start R.8!

- Watch this [Algebras Video](#) on exponent rules
- Take notes with [this document](#) and hand in to Mr. Schmidt
- **Do not do the “Skillz Review” or the 9.1 Applications**

R.8 Negative Exponents

Choose 4

Video (Original and Retake) $4/4 = A$ $3/4 = B$	IXL - D.8 (8th) and D.9 (8th)	Textbook Algebra I Pg 433 2 - 38 even	PDF This is worth 2 boxes
IXL - D.6 (8th) and D.7 (8th)	IXL - V.6 (Alg I) and D.11 (8th)	PDF 1 - 15 1 point 16 - 30 1 point	IXL - V.3 (Alg I) and V.9 (Alg I) Each IXL is worth 1

R.9 Scientific Notation

Choose 4

Video (Original and Retake) $4/4 = A$ $3/4 = B$	IXL - E.1 (8th) and E.3 (8th)	Textbook Algebra I Pg 439 7 - 33 odd	IXL - E.5 (8th) and E.6 (8th)
	Converting to Scientific Notation in the Real World Get from Mr. Schmidt	Real World Scientific Notation PDF 1 PDF 2 These are worth one box COMBINED.	Using Scientific Notation in the Real World Get from Mr. Schmidt

Quiz R.7 - R.9

Must score an 80% or above to not retake!

Test Unit 1

**You may not retake a test, but you must score above an 80% to
move on.**