

Topic: Unit 10: Rational Functions and Equations
 Subject(s):

Days: 13
 Grade(s):

Key Learning: Rational functions are used in applications to solve real world situations.



Unit Essential Question(s):
**How to recognize and
 manipulate rational functions arithmetically and
 algebraically?**



Concept:
**Algebraic and arithmetic manipulation of
 rational functions**

Concept:
Real world application of rational equations



Lesson Essential Question(s):
 How do you identify values excluded from the domain of a rational expression, then simplify the rational expression? (A)

 How do you multiply and divide rational expressions? (A)

 How do you add and subtract rational expressions? (A)

 How do you simplify a mixed expression and complex fraction? (A)

Lesson Essential Question(s):
 How do you use, apply and solve rational equations for real world problems? (A)



Vocabulary:
 rational expression, least common multiple, least common denominator, mixed expression, complex fraction, rational function, excluded value, asymptote

Vocabulary:
 rational equation, extraneous solution, work problem, rate problem

Additional Information:
 Sections 11.3, 11.4, 11.5, 11.6, 11.7, 11.8 omit sections 11.1, 11.2

Attached Document(s):

Vocab Report for Topic: Unit 10: Rational Functions and Equations

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Grade(s):

Concept: Algebraic and arithmetic manipulation of rational functions

rational expression, least common multiple, least common denominator, mixed expression, complex fraction, rational function, excluded value, asymptote -

Concept: Real world application of rational equations

rational equation, extraneous solution, work problem, rate problem -