Lesson 3.1 Solving Linear Equations with one Variable (Day 8)

W	ednesday	My Thinking	Correct/Compare
	_		
_ 2	$2x + \frac{x}{2} = \frac{5}{2}$		
_	2 2		
_			
_			
_			
_			
_			
_			
_			
			-

Lesson 3.1 Solving Linear Equations with one Variable (Day 8)

	Wed	Inesday	My Thinking	Correct/Compare
	2x	$+\frac{x}{2} = \frac{5}{2}$		
_		2 2		
_				1
				x = 1
_				
_				
_				
				•

Lesson 3.1 Solving Linear Equations with one Variable (Day 5)

Objective

TSW solve linear equations with one variable by simplifying expressions using distributive property, laws of equality, combining like terms and moving all the variables to one side of the equal sign.



Linear equations
can be used to solve
mathematical and realworld problems. A linear
equation with one variable
can have one solution, no
solution, or infinitely many
solutions.

TSW write repeating decimals as fractions using linear equations

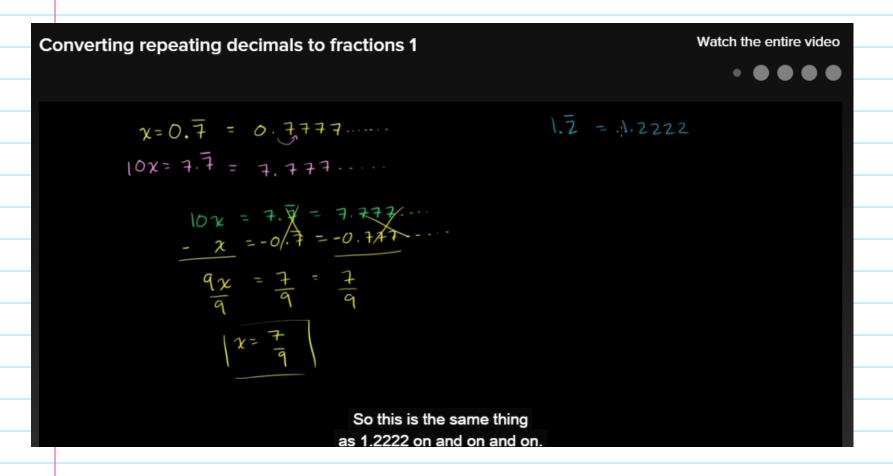
Common Core State Standards 8.EE.7 Solve linear equations with one variable

8EE 7 Solve linear equations in one variable.

8EE 7a Give examples of linear equations in one variable with one solution, infinity many solutions, or no solutions 8EE 7b Solve linear equations with rational number coefficients

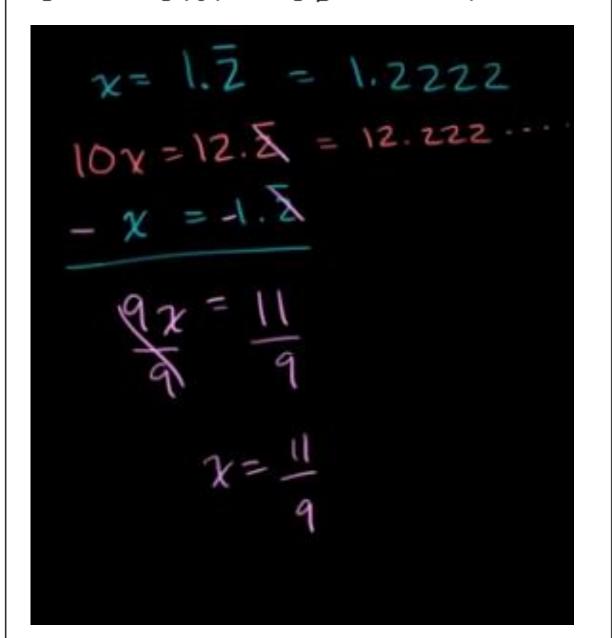
Mathematical Practices 1 Solve problems/persevere 2 Reason
 4 Model Mathematics 7 Look for and use structure

Converting Repeating Decimals to Fractions



https://www.khanacademy.org/math/algebra/solving-linear-equations-and-inequalities/conv_rep_decimals/v/coverting-repeating-decimals-to-fractions-1

Converting Repeating Decimals to Fractions



Step 1: Assign Variable to the repeating decimal

Step 2: Subtract X from 10X to get a terminating decimal

Step 3: Solve for X

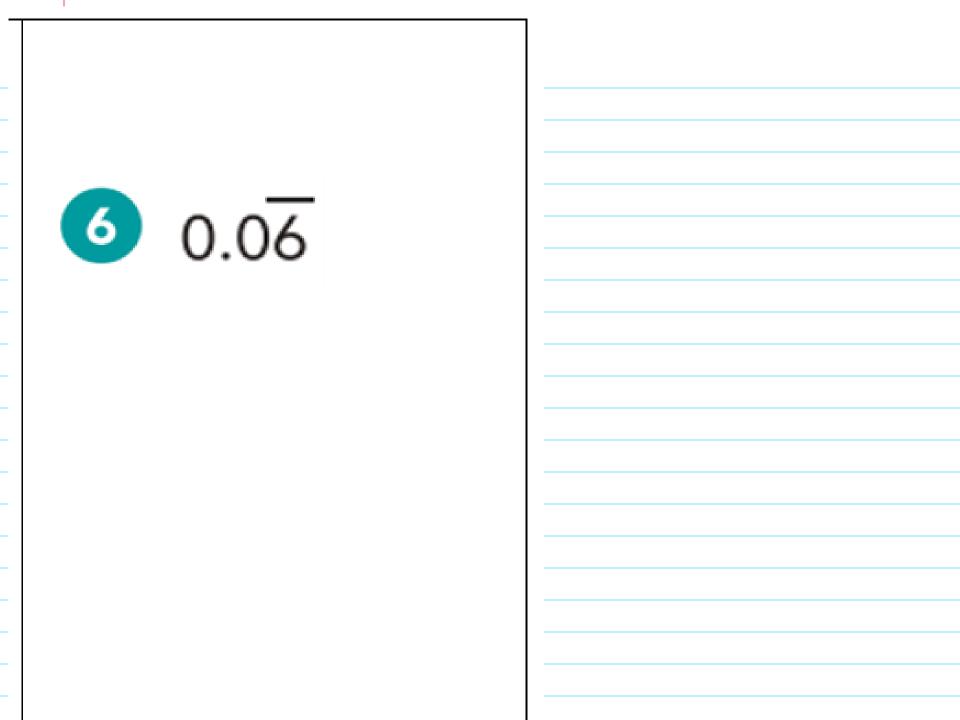
Guided Practice



Guided Practice



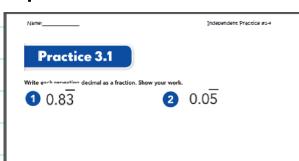
<u>'</u> 11



0.06 15

Lesson 3.1 Solving Linear Equations with one Variable (Day 8)

Independent Practice #1-4



$$\frac{3x-2}{8} + \frac{2-x}{4} = -\frac{1}{2}$$

Challenge- Solve created equation/

"Pick a pumpkin"



-Create Word-toons

Lesson Check —#2 Write repeating fractions as a decimal