Name: _____

Homework Assignments

Module 3 Unit 5 - Applying & Writing Equations and Inequalities

Standard	Description
7.EE.A.1	➔ Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients.
7.EE.A.2	Understand that rewriting an expression in different forms in a problem context can shed light on the problem and how the quantities in it are related.
7.EE.B.3	Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies.
7.EE.B.4	Use variables to represent quantities in a real-world or mathematical problems, and construct simple equations and inequalities to solve problems by reasoning about the quantities.

Lesson After FULLY completing a lesson, check the box below.	**I can...** After completing each lesson, you are on the right track if you can confidently state "I can..."
❑ 5.1	Write and solve one-step equation word problems
❑ 5.2	Write and solve one-step inequality word problems
❑ 5.3	Write and solve one-step equation & inequality word problems
❑ 5.4	Write and solve two-step equation word problems
❑ 5.5	Write and solve two-step inequality word problems
❑ 5.6	Write and solve two-step equation & inequality word problems

Homework is due the following day, but you can always turn it in early!

The skills and concepts that you learn in this packet will appear as your grade for the standards listed above.	
A = 4 EXCEEDS	All questions have been attempted and have justification that proves and explains their solution.
B = 3 MEETS	Most questions have been attempted and have justification that proves and explains their solution.
C = 2 DEVELOPING	Some or all questions are attempted, but does not contain a justification or explanation for the solution.
D = 1 WELL BELOW	Few or none of the questions are attempted, and does not contain a justification or explanation for the solution.

Dear Students,

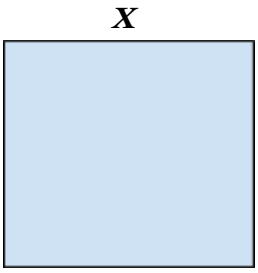
I know that math homework can be a **DAUNTING** task and sometimes it's hard to find the time to complete it. Please know that these assignments have been designed to help support your mathematical *thinking* - my goal is not to give you busy work. We will use homework to have conversations and practice in class the following day so it is really **important** that you try to complete it each night. If you need help, email me!

Name: _____ Date: _____ Score: __/4

Independent Practice Lesson 5.1

DIRECTIONS: Use a model to write AND solve an equation for the following scenarios. *Initials:* _____

1. The figure below depicts a **square** with side length of "***x***". If the perimeter (the sum of all four sides) of the square is 50, what is the length of each side of the square? Write an equation and solve.



2. Last week, Amy ran 3 miles more than her goal for the week. She ran a total of 39 miles. What was her goal for the week? Write an equation and solve.

What are you struggling with when beginning to write equations?

Name: _____ Date: _____ Score: __/4

Independent Practice Lesson 5.2

1. Each of 7 kittens, weighs less than 3.5 ounces. Find all the possible values of the combined weights of the kittens.

Known information:	Variable and what it represents:	What's the relationship?	Inequality:
Full Inequality Equation	Solution and what it means:		

2. The difference of a number and 123.4 is greater than 100.2. What numbers can fit these requirements?

3. Create your own word problem and write an inequality to go with it.

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Independent Practice Lesson 5.3			
Directions: For each problem below... 1. Decide whether the scenario is best represented by an equation or inequality. 2. Write the equation or inequality. 3. Solve & Check.			
READ THE DIRECTIONS CAREFULLY!!			
Word Problem (Hint: circle keywords)	**(COMPLETE ALL) Represented by an equation (E) or inequality (I)?**	**CHOOSE TWO to write an equation or inequality and solve.**	**Solution for the TWO you chose to write an equation or inequality for.**
1. LJ mows lawns on the weekends. He charges $15 per lawn. Last weekend he made a total of $45. How many lawns did he mow?			
2. The vet says that Heaven's cat will grow to be at most 18 pounds. Heaven's cat is currently 7 pounds. How many more pounds could the puppy grow?			
3. The party planner plans to spend no more than $250 on balloons. Balloons cost $8.25 per dozen. What is the maximum number of balloons the planner can order?			
4. Khiree bought some slippers that cost $9 each. She spent a total of $45. How many pairs of slippers did she buy?			
5. Brett has a $30 online gift voucher. He plans to buy as many books as he can. The cost of each book is $4. How many books can he afford without spending more than his gift voucher amount?			

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Independent Practice Lesson 5.4

DIRECTIONS: For each scenario write a two-step inequality and solve.

1. Jeff sold half his baseball cards and then bought 16 more. He now has 21 baseball cards. How many cards did he begin with? A. 8 B. 10 C. 42 D. 5

2. Sara bought a soft drink for 2 dollars and 6 candy bars. She spent a total of 32 dollars. How much did each candy bar cost?

3. Joan sold half her comic books and then bought 9 more, She now has 12. How many comic books did she begin with?

4. On Monday, 495 students went on a trip to the zoo. All nine buses were filled and 9 students had to travel in cars. How many students were on each bus?

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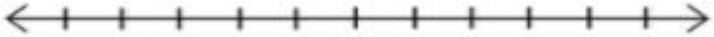
Independent Practice Lesson 5.5

1) The community swimming pool charges a flat rate of $50 for a birthday party plus $2.50 for each person. Deborah can't spend more than $100. How many friends can she invite?

Known information:	Variable and what it represents:	What's the relationship?:	Inequality:
Solution and what it means:			

2) David owns a Yellow Cab. The company charges a flat rate of $2.50 for every cab ride, plus $0.85 per mile. David figures he needs to average at least $12 for each cab ride to make a profit. At least how many miles must rides average to make a profit?

Known information:	Variable and what it represents:	What's the relationship?:	Inequality:
Solution and what it means:			

3. Harry wants to download some songs to his mp3 player. If he gets a $20 gift card for his birthday and each song costs $0.90, at most how many songs can he download?

Known information:	Variable and what it represents:	What's the relationship?:	Inequality:
Solution and what it means:			

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Independent Practice Lesson 5.6

DIRECTIONS: Write & solve the correct two-step equation or inequality for each scenario below.

1. Six friends earned more than $400 washing cars. They paid their parents $46 for supplies and divides the rest of the money equally. Write and solve an ***EQUATION OR INEQUALITY (Circle One)*** to find x, the amount each friend earned from washing cars.

2. Benny had 97 dollars to spend on 9 books. After buying them he had 16 dollars. Write and solve an ***EQUATION OR INEQUALITY (Circle One)*** to find out how much did each book, b, cost.

3. The Dawson family budgets less than $298 for a hiking trip. Mr. Dawson already spent $100. Write and solve an ***EQUATION OR INEQUALITY (Circle One)*** to find out how many people, p, can go hiking if the cost is $18 per person.

4. List any words or ideas that helps you to know if the problems from above were an ***EQUATION OR INEQUALITY:***

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Study Guide

Directions: Use the following guiding questions, enduring understandings, vocabulary and models, to make a visual study guide in the box below. Feel free to add information on the back or on a separate sheet of paper.

Unit 5 Study Guide