Translating Words into Math

Summary

This lesson will teach/reinforce the skill of translating English sentences into math expressions and/or equations.

Main Core Tie

Mathematics Grade 7

Strand: EXPRESSIONS AND EQUATIONS (7.EE) Standard 7.EE.4

Additional Core Ties

Secondary Mathematics I

Strand: ALGEBRA - Creating Equations (A.CED) Standard A.CED.1

Time Frame

1 class periods of 45 minutes each

Group Size

Small Groups

Life Skills

Thinking & Reasoning, Communication, Systems Thinking

Background for Teachers

instruction materials are found on the linked website.

Student Prior Knowledge

This lesson assumes that the student has mastered the skills of adding, subtracting, multiplying, and dividing one digit numbers.

Intended Learning Outcomes

The student will represent verbal quantitative situations algebraically and evaluate these expressions for given replacement values of the variables

Instructional Procedures

The lesson begins with a short preassessment worksheet: <u>wuexpressions-1.pdf.</u> In large-group format the teacher presents the powerpoint lesson translating_words_into_math.ppt, using data from the pre-assessment to drive instruction. The listed websites on the materials page may also be used as needed. The handout wordsforoperations.pdf is then handed out for the students to use as a reference. In small groups, students complete the bingoexpr-1.pdf and/or whohasexpr-2.pdf as time allows. Homework is done individually: hw_variablesexpressions-1.pdf. Optional: Journal Prompt.

Strategies for Diverse Learners

For the struggling student, use sgvariablesexpressions.pdf as homework. For the gifted student, use "translating expressions."

Extensions

To promote engagement, consider baseballmath-1.pdf as an extension. There is also a video of the lesson on the materials website that can be uploaded to the class website for review by the students at home.

Rubrics

Math Problem Solving Rubric

Bibliography

open-source materials from Henrico County Schools

Authors

Tina Eagar