8th Grade Math Choice Board

Activities for the Week of May 11, 2020

You can always add 30 minutes per day of iReady Math and Iready Reading.

Functional Relationship

Circle the set of ordered pairs that represent a functional relationship.

(-7,-6) (-4,-3) (4,5) (5,6) (6,7)
(-4,3) (-2,2) (-4,0) (5,8) (6,10)

Script

Pretend you were asked to write a movie for properties of integer exponents. Write a script that explains each property. Include an example of each and steps explaining how to solve each problem.

Math Music...

On your own or with a partner, create a song that teaches the steps for solving equations with rational coefficients.

Write an Expression

An artist charges a $75 supply fee, plus $40 per hour for classes. Write an expression to represent the total cost, C, of lessons as a function of the number of hours, H, of the lesson.

Teach It

Pretend you needed to teach the class about solving systems of linear equations. How would you go about teaching this topic? Write your own mini-lesson with facts and examples. Make sure to include examples for elimination, substitution, and graphing.

Exponent Number Battle

Players: Groups of two or more
Materials: Deck of cards, face cards worth ten, Ace worth
Skill: Multiplication, base, exponents
How to Play: Players split a deck of cards and simultaneously flip over their top two cards, the first card is the base and the second card is the exponent. The highest product wins all cards. Play continues until all cards are played. Player with the most cards wins.

Many cable television companies charge a flat rate for a cable TV package. As an alternative, some cable companies are starting to offer packages where customers pay a flat rate for access, plus a fee per channel. Two of these companies are described below. • TV Party charges a $40.00 flat rate plus $1.50 per channel. • Cable Club charges a flat rate of $20.00 plus $3.00 per channel.

1. Alicia argues that the companies will always cost the same amount as each other for any number of channels since the cost per channel for Cable Club is twice the cost per channel of TV Party, but the flat rate is half of TV Party's. Do you agree or disagree with Alicia? Justify your reasoning using tables, equations, and graphs.

2. Create another cable plan that also charges a flat rate for access, plus a fee per channel. Create this cable plan so that it is always less expensive than TV Party and Cable Club. Explain how you know that your plan will always be less expensive.

3. Is it possible to create a cable plan that is less expensive than TV Party for any number of channels, but more expensive than Cable Club for any number of channels? Use words and equations to justify your answer.