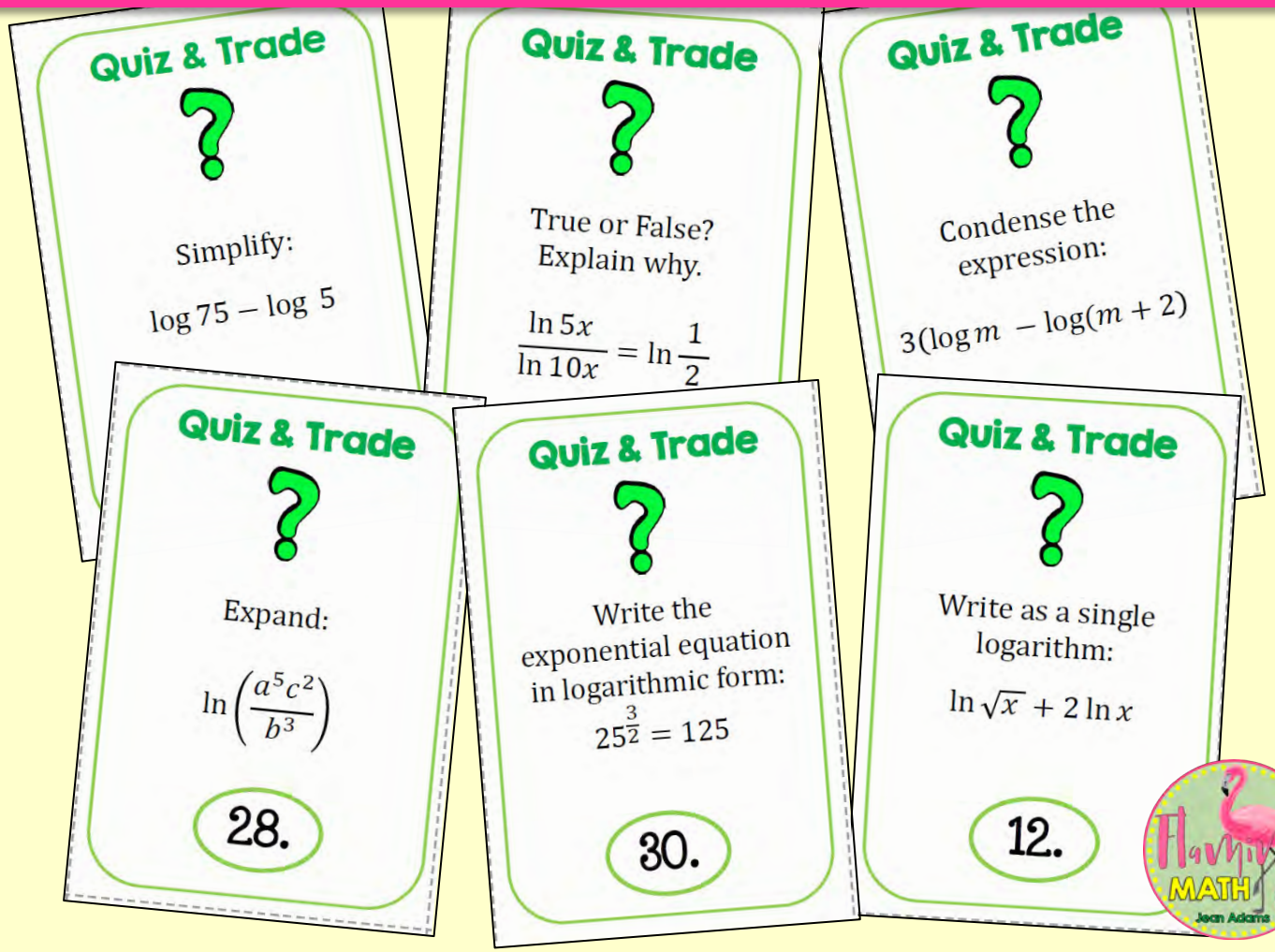
Properties of Logarithms

Quiz and Trade





Quiz and Trade Properties of Logarithms Review

This **Properties of Logarithms Quiz and Trade Activity** is made for your Algebra 2 or PreCalculus students to gain proficiency in their ability to recall important concepts and recall facts related to the properties of logarithms.

You will find a **set of 32 Task Cards** with answers available for two-sided printing. This will make the activity self-checking and provide time for you to monitor student difficulties.

Students will practice the following skills:

- ☑ Evaluate logarithms
- ☑ Write logarithmic expressions as a single logarithm
- ☑ Expand logarithmic expressions
- ☑ Simplify logarithmic expressions using properties
- ☑ Solve basic exponential and logarithmic statements
- ☑ Find exact values of logarithmic and exponential expressions
- ☑ Write logarithmic expressions as exponential form
- ☑ Write exponential form as a logarithm
- ☑ Defend and justify "True or False" statements

Teaching Suggestions:

- Use the set as a group activity for a Quiz and Trade Learning Strategy.
- Use the cards as an independent activity prior to assessing students.

This activity is an adaptation of the learning strategy by Dr. Spencer Kagan. Kagan® Publishing and Professional Development is a registered trademark and was not involved in the creation of, and does not endorse this product.

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TEACHER NOTES:

Learning Objectives:
This activity covers key concepts from Trigonometric Functions.

PREPARATION:
1) Decide whether you will copy the cards with or without answers on the back. If you decide to copy answers on the back of the cards, then choose "FLIP ON SHORT SIDE" on your printer.
2) Copy cards onto cardstock.
3) Laminate for durability.

USING THE ACTIVITY:

This activity is an adaptation of the learning strategy by Dr. Spencer Kagan. Kagan® Publishing and Professional Development is a registered trademark and was not involved in the creation of and does not endorse this product.
This Kagan® Strategy is a seven-step process.
First, create a set of task cards that have questions on one side. Provide a post-it note or white board for students to respond to the activity.

1. Each student gets one question and answers their prompt.
2. Partner A will find another student (Partner B) and quiz them on their card.
3. Partner B answers your card, you are the expert.
4. Partner A coaches or praises.
5. Switch roles.
6. Partners trade cards and find another partner.
7. Repeat steps 1 – 6 several times.

EXTENSION:
Have students work through the cards in a math station for independent practice.

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Quiz & Trade

Simplify:

$5\log x + 2\log x$

1.

Quiz & Trade

Simplify:

$\log 5 + 3\log 2$

2.

Quiz & Trade

Evaluate:

$\log_2 2^{-12}$

3.

Quiz & Trade

Evaluate:

$e^{\ln 7}$

4.

Quiz & Trade

Evaluate:

$\log_6 9 + \log_6 4$

5.

Quiz & Trade

Simplify:

$\log 75 - \log 5$

6.

Quiz & Trade

Simplify:

$\log 64 - \log 4$

Evaluate:

$3^{2\log_3 5}$

Quiz & Trade

Expand:

$\log_3(27x)$

9.

Quiz & Trade

Expand:

$\log_3\left(\frac{x}{81}\right)$

10.

Quiz & Trade

Expand:

$\ln(ex)$

11.

Quiz & Trade

Write as a single logarithm:

$\sqrt{x} + 2\ln x$

12.

Quiz & Trade

Condense the expression:

$\ln 8)$

20.

Quiz & Trade

Find exact value:

$2^{\log_2 8}$

25.

Quiz & Trade

Find exact value:

$5^{\log_5 6 + \log_5 5}$

26.

Quiz & Trade

Expand:

$\log_3 \sqrt{x-2}$

27.

Quiz & Trade

Expand:

$\ln\left(\frac{a^5c^2}{b^3}\right)$

28.

Quiz & Trade

True or False?
Explain why.

$\log 10^{2x} = 2x$

21.

Quiz & Trade

True or False?
Explain why.

$\frac{\ln 5x}{\ln 10x} = \ln\frac{1}{2}$

22.

Quiz & Trade

Solve:

$5^{2x} = 125$

23.

Quiz & Trade

Solve:

$9^{2x} = 27$

24.

Quiz & Trade

Write as a single logarithm:

$\frac{3}{2}\ln x^6 - \frac{3}{4}\ln x^8$

29.

Quiz & Trade

Write the exponential equation in logarithmic form:

$25^{\frac{3}{2}} = 125$

30.

Quiz & Trade

Write the logarithmic equation in exponential form:

$\log_3\frac{1}{9} = -2$

31.

Quiz & Trade

Write the logarithmic equation in exponential form:

$\ln(3x) = 5$

32.

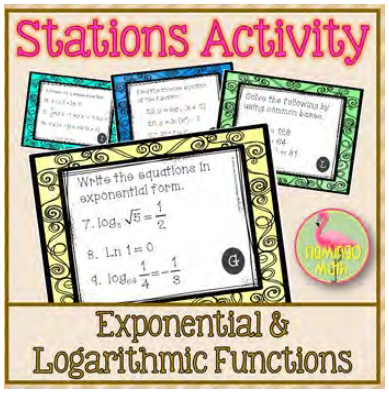
PREVIEW

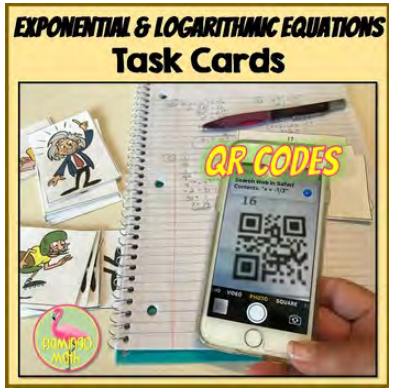


My goal is to help you bring balance into your teacher life by providing relevant content, engaging activities, and comprehensive assessments for your high-stakes math course.

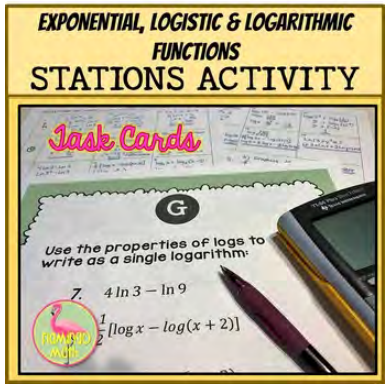
Jean

More Resources for YOU









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TPT

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