Observed Lesson Plan highlighted in pink.

The pages following this demonstrate each section of the lesson.

Math 8	C.C. Standards	Objective: Essential questions addressed	Warm-UP and Vocabulary	Instruction	Assignment	Bloom's Taxonomy triangleversion
Mon 1/2				Winter Break		Week:17
Tues 1/3	8.G.6 8.G.7 8.G.8 8.EE.2	I can find relationships when comparing the lengths of the sides of a right triangle	WWK: Right Triangle Square Diagonal Hypotenuse legs W.U. - find the area of quadrilaterals, draw diagonals of quads	PT: The Pythagorean Relationship - puzzle that proves the Pythag. theorem using the area of squares model Postponed until after break.	Complete Performance Task	apply
Wed 1/4	8.G.6 8.G.7 8.G.8 8.EE.2	I can find relationships when comparing the lengths of the sides of a right triangle	Root Index Cube root	Pythag Relation PT - Finalize relationship for Pythag with additional ex Practice with Square Roots	Squares and Square Roots	Evaluate and analyze (wu and mastery)
Thur 1/5	8.G.6 8.G.7 8.G.8	I can use the Pythagorean Theorem to find the missing side	Video for WU	Direct Instruction - Pythag Thm Proof, quote, picture, 3 ways to solve	Solve for leg	Make sure p d

Content Standards Covered:

Understand and apply the Pythagorean Theorem.

CCSS.MATH.CONTENT.8.G.B.6

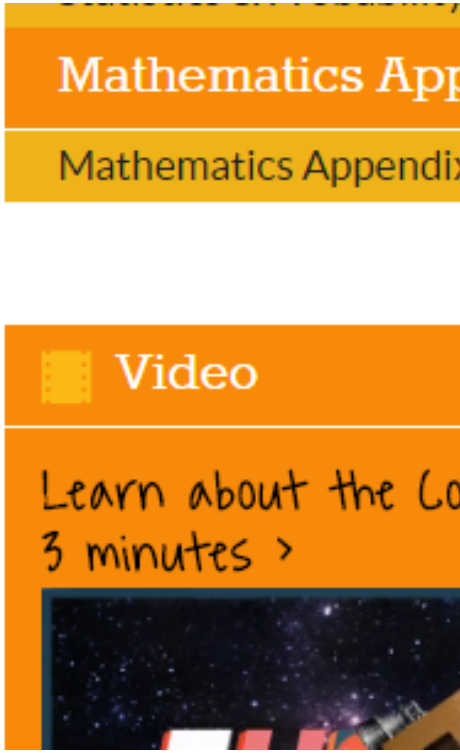
Explain a proof of the Pythagorean Theorem and its converse.

CCSS.MATH.CONTENT.8.G.B.7

Apply the Pythagorean Theorem to determine unknown side lengths in right triangles in real-world and mathematical problems in two and three dimensions.

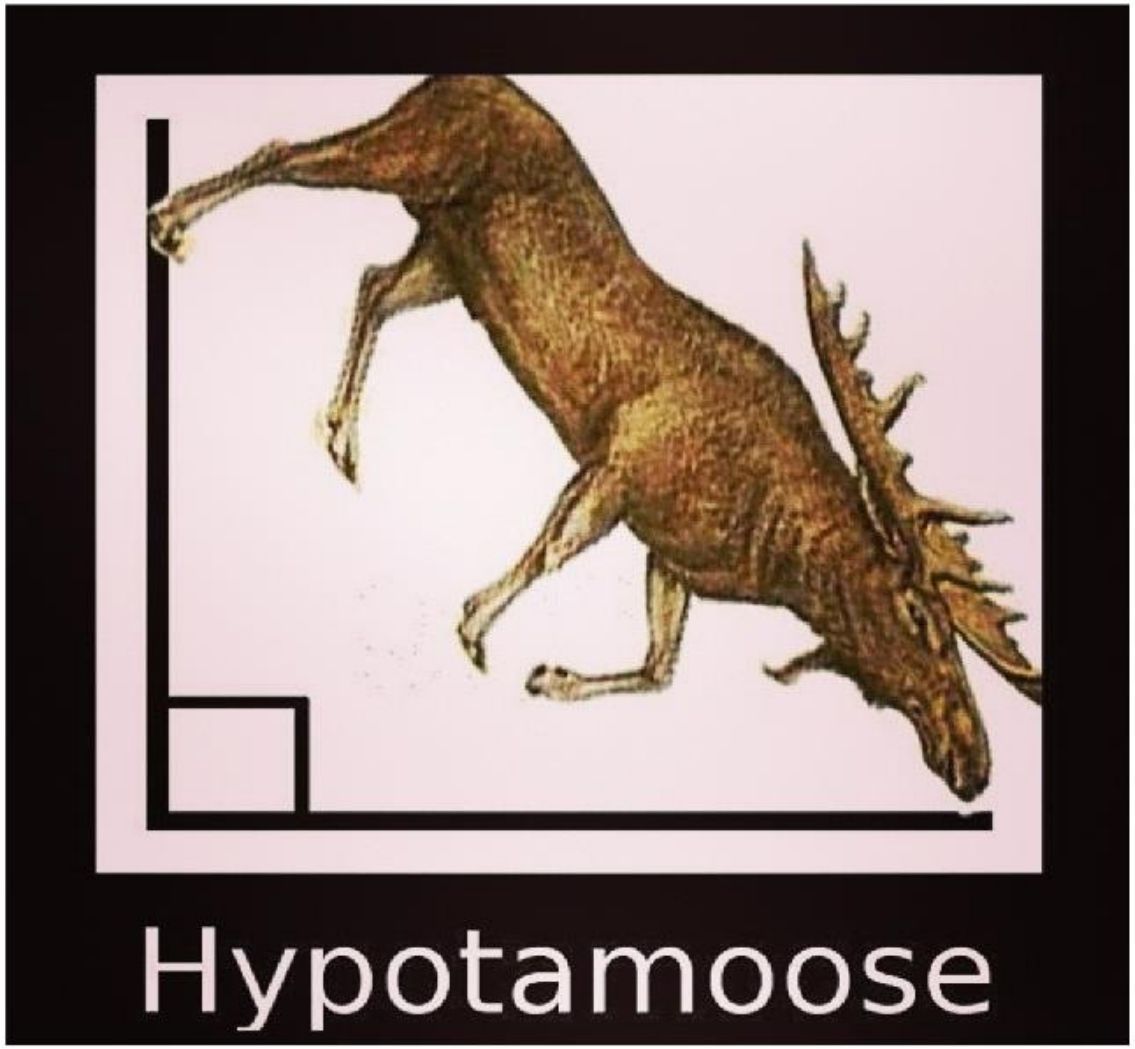
CCSS.MATH.CONTENT.8.G.B.8

Apply the Pythagorean Theorem to find the distance between two points in a coordinate system.



Entry:
As students enter the class, this is on the board to generate discussion about previous day's vocabulary lesson:

What???!!!



1. Learning Target

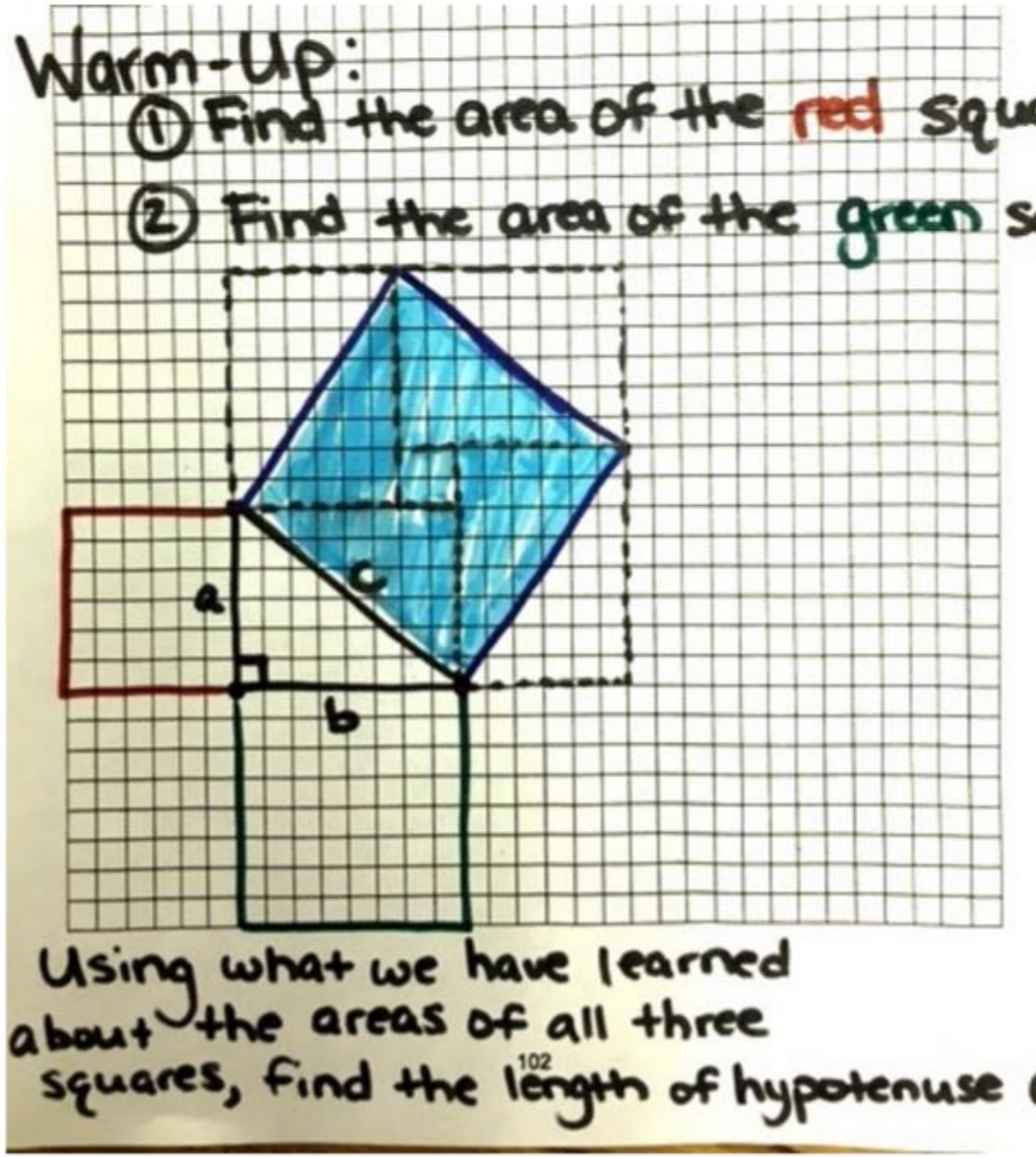
2. Warm-up – taking previous lesson's performance task deeper.

3. MBP= Mathematical Best Practice focus for the day.

I can find relationships when comparing the lengths of the sides of a right triangle.

W17D2

M.B.P.: 5



Mathematical Best Practice 5:

Use appropriate tools strategically.

A.K.A. I can use math tools and explain why I use them.

Students given time to work on this individually, or with a partner. Some student work was shared with the class.

Am I a Master?

Given a right triangle with side lengths of

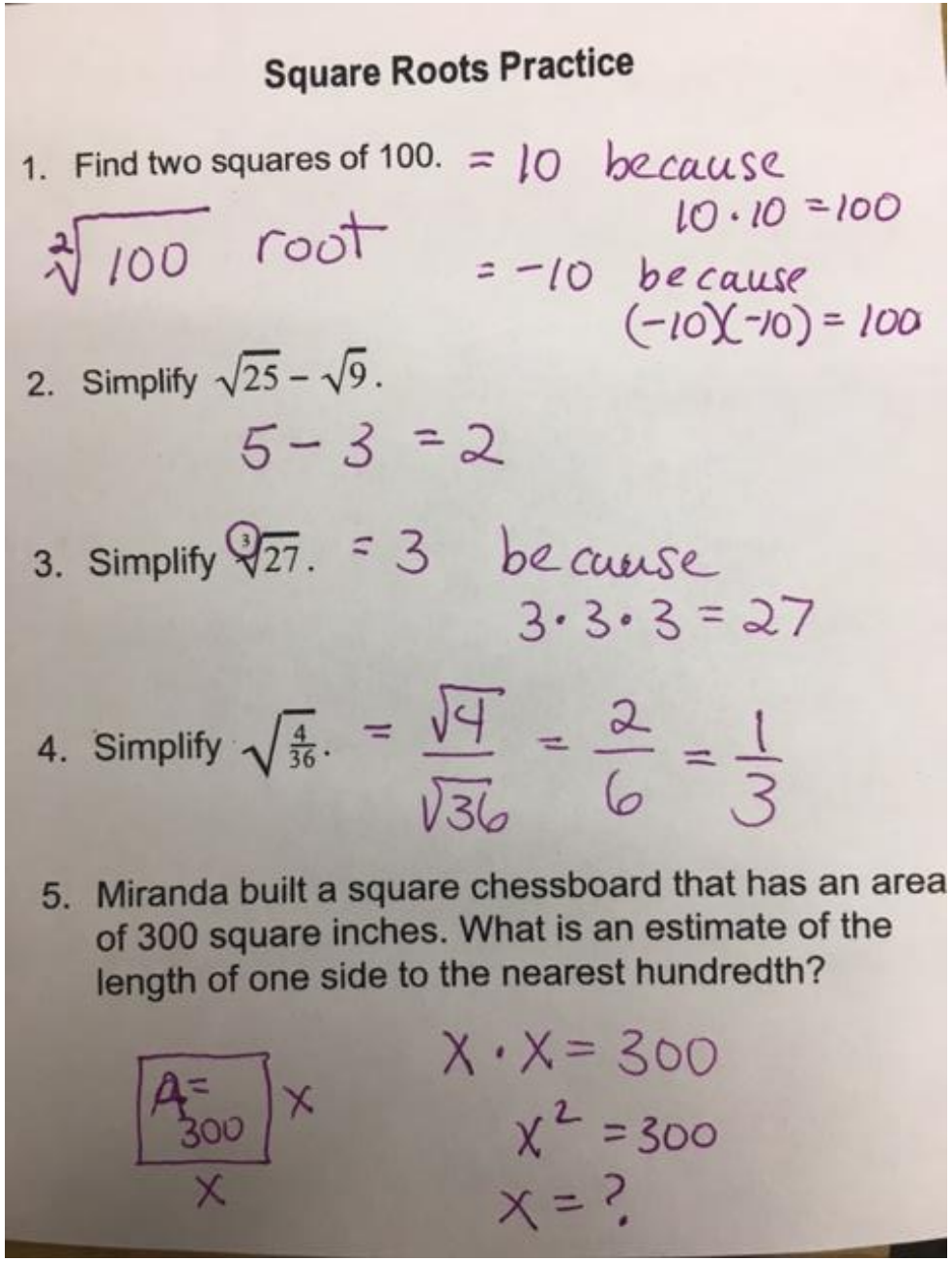
$a = 7$ and $b = 3$

1. Make a sketch of this situation.
2. What is a conclusion you can make?

Direct Instruction –

This example set was used to make connections to material learned earlier in the unit. These skills are required for upcoming lessons on using the Pythagorean Theorem to solve a right triangle.

This will be glued into each student's interactive notebook on the day following.



Square Roots Practice

1. Find two squares of 100. = 10 because $10 \cdot 10 = 100$

$\sqrt[2]{100}$ root = −10 because $(-10)(-10) = 100$

2. Simplify $\sqrt{25} - \sqrt{9}$.

$5 - 3 = 2$

3. Simplify $\sqrt[3]{27}$. = 3 because $3 \cdot 3 \cdot 3 = 27$

4. Simplify $\sqrt{\frac{4}{36}}$. $= \frac{\sqrt{4}}{\sqrt{36}} = \frac{2}{6} = \frac{1}{3}$

5. Miranda built a square chessboard that has an area of 300 square inches. What is an estimate of the length of one side to the nearest hundredth?

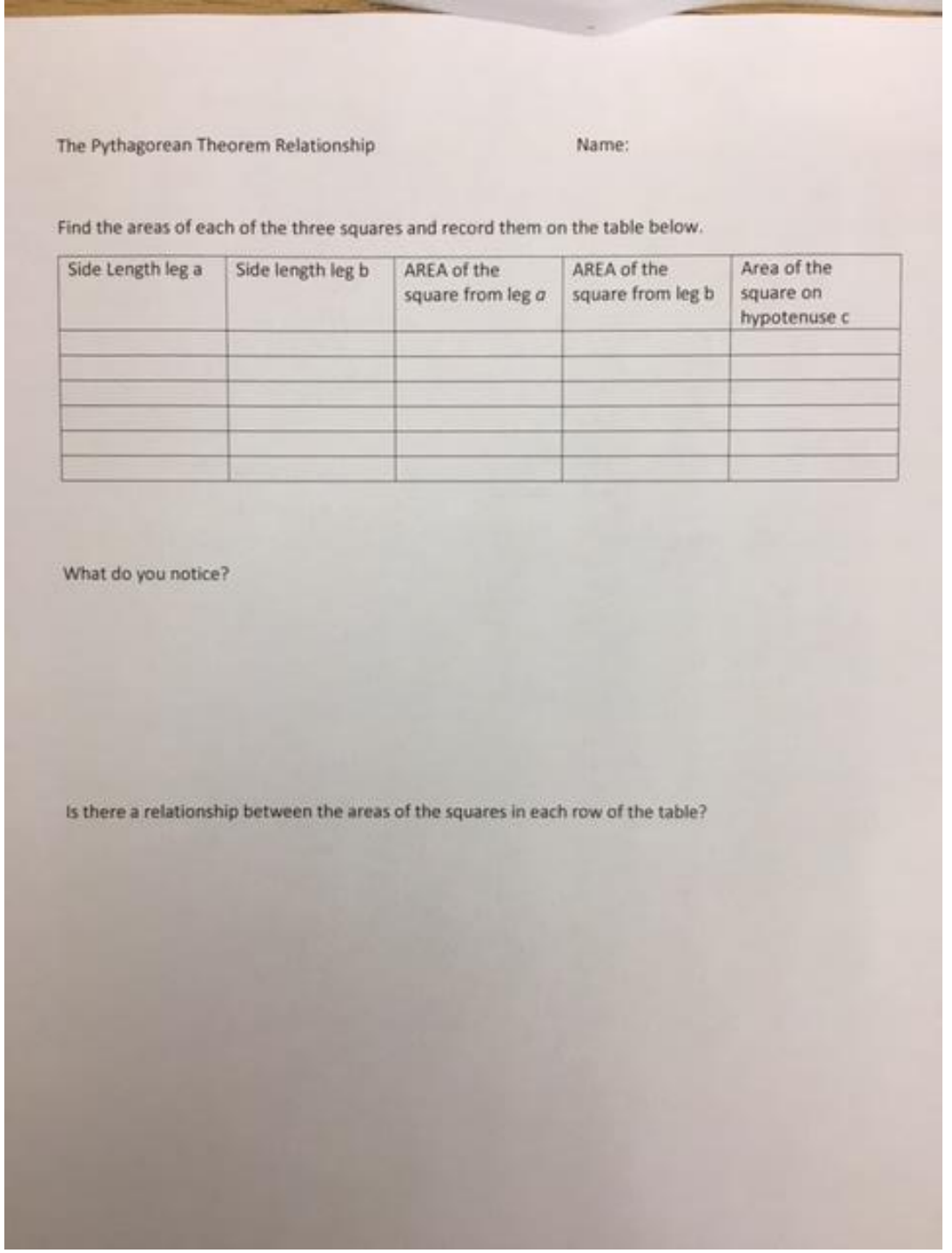
A = 300, x, x

$x \cdot x = 300$

$x^2 = 300$

$x = ?$

Assignment:



The Pythagorean Theorem Relationship Name:

Find the areas of each of the three squares and record them on the table below.

Side Length leg a	Side length leg b	AREA of the square from leg *a*	AREA of the square from leg b	Area of the square on hypotenuse c

What do you notice?

Is there a relationship between the areas of the squares in each row of the table?