

A standard that *feeds* my standard(s) say(s)...

My standard(s) say(s)...

A standard that *flows from* my standard(s) say(s)...

This means a student must

Know:

And be able to:

This matters in my discipline because...

And it matters to a student because...

To show me they know, they could...

If they're going to be ready to show me they know that, then I have to build in opportunities for them to...

To show me they can _____, they could...

If they're going to be ready to show me they can do that, then I have to build in opportunities for them to...

A standard that *feeds* my standard(s) say(s)...

<http://turnonccmath.net/index.php?p=map>

CCSS.Math.Content.7.EE.B.4

My standard(s) say(s)...

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.

A standard that *flows from* my standard(s) say(s)...

[G-SRT.C.6](#)

[G-SRT.C.8](#)

This means a student must

Know:

The full text of the Pythagorean Theorem

What it is to square or to take a square root

And be able to:

Square a number Identify situations in which the PT applies (2- & 3-D)

Take a square root Identify the information to use for each variable for a given number of dimensions (2- & 3-D) and use the information appropriately

To show me they know, they could...

Recite, perform, or display the theorem's full text

Says, means, matters for the theorem itself

Execute calculations on a quiz or in a context

To show me they can _____, they could...

Draw plays from football games and determine the distance the QB must throw to a receiver

Given safety restrictions for a ladder, determine the length needed to clean gutters

Verify that the baselines on the baseball field are at right angles (Converse)

This matters in my discipline because...

The Pythagorean Theorem undergirds:

- the distance formula
- trigonometry (geometric)
- trigonometry (functions)
- polar functions

And it matters to a student because...

- Application in football - <http://tinyurl.com/mkmlr4k>
- possible employment applications - <http://tinyurl.com/3dzz7cg>

If they're going to be ready to show me they know that, then I have to build in opportunities for them to...

Use appropriate tools strategically (calculators for sq roots & large/complex squares)

Attend to precision (problem conditions which permit the application of the theorem)

If they're going to be ready to show me they can do that, then I have to build in opportunities for them to...

Use appropriate tools strategically (calculators for sq roots & large or complex squaring)

Model with mathematics (represent a situation in terms of the PT)

Attend to precision (degree of precision required for a given calculation)

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This *means* a student must

Know:

And be able to:

This *matters* in my discipline because...

And it *matters* to a student because...

To *show* me they *know*, they could...

To *show* me they *can* _____, they could...

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If they're going to be ready to show me they can do that, then I have to build in opportunities for them to...