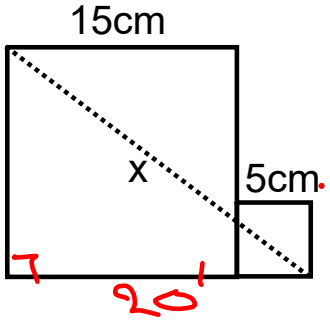
Warm-up: Geometry 1/22

1) Both figures are squares, find x.



Converse: a situation, object, or statement that is the reverse of another

2) Write the converse of this "If-Then" statement:

"If I am a Golda student, then I am smart."

Jan 21-9:39 AM

Agenda:

Warm-up

Video Release Form

Notes

In-class work

P.W. Assignment #2-evens due tomorrow

Jan 21-3:42 PM

W.A.L.T.:

Understand the converse of the Pythagorean Theorem.

W.A.S.I.:

We can use the converse of Pythagorean Theorem to solve right triangle problems.

Jan 21-9:40 AM

Notes:

Pythagorean theorem:

IF we have a right triangle, THEN the sum of the square of the legs will equal the square of the hypotenuse.

Conditional statement

Jan 21-9:41 AM

Notes:

Converse of Pythagorean theorem:

IF the sum of the square of the legs will equal the square of the hypotenuse
THEN we have a right triangle

Jan 21-9:41 AM

Class-work:

Triangle Side Lengths	Type of Triangle	Square of Longest Segment	Sum of the Squares of the Two Shorter Sides
1) 5, 12, 13	right	$13^2=169$	$5^2+12^2=169$
2) 6, 6, 12		144	72
3) 5, 6, 12		144	$25+36=61$
4) 5, 12, 15	obtuse	$15^2=225$	$25+144=169$
5) 5, 12, 12	acute	144	169
6) 6, 12, 13			
7) 6, 12, 15			

Jan 21-9:41 AM

Notes:

What would happen in each of these situations? Why?

$a^2 + b^2 = c^2$ → right △

$a^2 + b^2 < c^2$ → obtuse △

$a^2 + b^2 > c^2$ → acute △

Jan 21-9:41 AM

Class-work:

For #'s 1-4, determine what type of triangle it is. Round answers to the nearest tenth (0.1).

1) 76, 120, 98

2) 221, 204, 85

3) 5.0, 1.4, 4.8

4) 80, 82, 18

3.) $5^2 = 1.4^2 + 4.8^2$

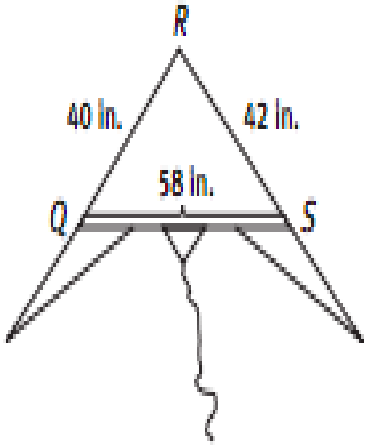
$25 = 1.96 + 23.04$

$25 = 25$

Jan 21-9:41 AM

Class-work:

One of Sara's customers designed the kite shown. The customer claims that ΔQRS is a right triangle.



1) Is the customer correct?

2) What type of triangle is it?

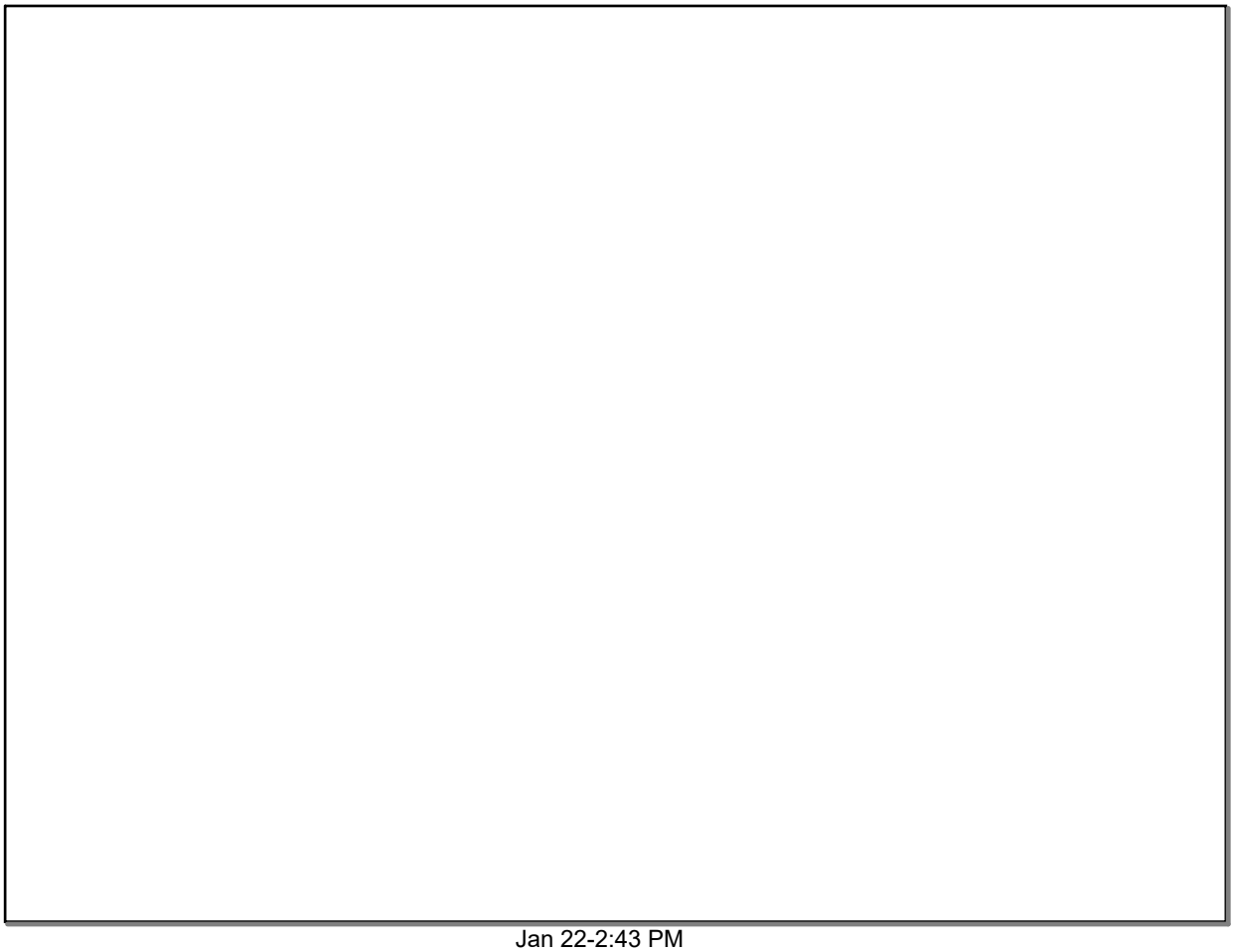
Jan 21-9:41 AM

P.W.:

Assignment #2 - Pythagorean Worksheet (evens)

Due tomorrow at the beginning of class.

Jan 21-9:42 AM



Jan 22-2:43 PM