

SAS October 1, 2018, Monday

1) 2) 3) Vocabulary Check!

1) Draw two triangles which are congruent (with leg lengths &/or angles) *3 ways*
 2) Draw two triangles which are similar (with leg lengths &/or angles) *3 ways*
 3) Draw a midsegment of a triangle (using tic marks where appropriate)
 4) What two geometric tools can you use to make geometric constructions?
 Compass
 Protractor

Sep 20-8:31 AM

Unit 2 Study Guide Part 2

1) Determine the dilator scale factor.
 $H(0,2)$, $H'(0,3)$
 $\frac{4}{3} = 1.33$
 $\frac{24}{18} = 1.33$
 $\frac{15}{11} = 1.36$
 $\frac{2}{1.5} = 1.33$

2) Find the missing side, z .
 $15^2 + z^2 = 25^2$
 $z^2 = 600$
 $z = 24.5$

Determine if each set of triangles are similar by AA-, SAS- or SSS- otherwise, write Not Possible.

3) $\frac{10}{20} = .5$, $\frac{12}{24} = .5$, $\frac{15}{30} = .5$
 4) $\frac{10}{12} = .83$, $\frac{15}{18} = .83$
 5) $\frac{3}{6} = .5$, $\frac{4}{8} = .5$, $\frac{5}{10} = .5$
 6) $\frac{8}{16} = .5$, $\frac{10}{20} = .5$, $\frac{12}{24} = .5$
 7) If $DE = 15$ and $BC = 30$, find x .
 $\frac{DE}{BC} = \frac{15}{30} = .5$
 $\frac{2DE}{2(3x-15)} = .5$
 $\frac{2(3x-15)}{6x-30} = .5$
 $\frac{6x-30}{6x-30} = .5$
 $6x = 30$
 $x = 5$

14) Given that M, P, & N are midpoints, find the perimeter of $\triangle MPN$.
 Perimeter of $\triangle MPN = 61$
 Perimeter of $\triangle XYZ = 50 + 30 + 42 = 122$

For all by-hand constructions use a compass and straightedge. DO NOT erase your construction marks.

15) Copy the angle. 16) Construct a regular hexagon inscribed in the circle.

17) Bisect the angle. 18) Construct a perpendicular bisector.

19) Construct a parallel line through the given point. 20) Construct a square inscribed in a circle.

TRY ANY 3!

Constructions Review

Match each construction to its image. Highlight the first step of each construction. If complete, highlight the last step of the construction in another color. If incomplete, complete the construction.

21) A. Copying an angle 22) B. Hexagon inscribed in a circle 23) C. Copying a line segment 24) D. Bisecting an angle 25) E. Square inscribed in a circle 26) F. Parallel line 27) G. Perpendicular bisector 28) H. Perpendicular line through a point on a line 29) I. Perpendicular line through a point not on the line 30) J. Equilateral triangle inscribed in a circle

October 2, 2018, Tuesday

What is being constructed? angle bisector
 What is the next step? move compass to the point on QR

$2(3x-5) = 26$
 $6x - 10 = 26$
 $6x = 36$
 $x = 6$

Are the triangles similar? How?
 No similar triangles!

Test!

Test

You may skip 1 problem per page, please write 'skip' on that problem otherwise I will grade it.

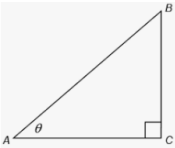
16. You may complete the construction described or a equilateral triangle inscribed in a circle. Please leave construction marks (= do not erase!).

Sep 20-8:32 AM

Oct 2-7:58 AM

Using a laptop find out what SOHCAHTOA means. Write it in mathematical terms (letters & variables).

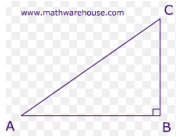
Label the following triangle using the words: hypotenuse, opposite & adjacent



Oct 2-11:13 AM

October 3, 2018, Wednesday
Unit 3 - Right Triangle Trigonometry

State a minimum of 5 characteristics of the following triangle.



Sep 20-8:33 AM

Unit 3 - What is Right Triangle Trigonometry?

<https://youtu.be/9LY8e9SpIQI> by Garrick

While watching this video, list 5 important things you discover in your notebook.

Sep 20-8:48 AM

p585

Draw the Ratio in a Right Triangle, labeling all part of the right triangle

p590 Use the argent to find the unknown side length. #9-14

p 590 Use the tan-1 to find the unknown angle measure #15-17

Sep 20-10:57 AM

What does the tangent ratio help you find?

<https://youtu.be/BLHk7WkgdKw> by Owens

Sep 20-11:00 AM

Copy p594 Trig Ratios

How does this fit in our SOHCAHTOA?

Sep 20-11:15 AM

Let's start with sine (SOH)...

Sep 20-11:17 AM

& now for cosine (CAH)...

Sep 20-11:19 AM

Can you use multiple ratios (SOH), (CAH), and/or (TOA)?

Sep 20-11:23 AM

Let's explore some resources about trigonometry ratios on Geogebra...

<https://www.geogebra.org/m/ku57SuX2material1UZDwVDe> brzenoi geobra trig ratio

<https://www.geogebra.org/m/ku57SuX2material1UZDwVDe> ayooB trig ratio veiving triangles

Write down 3 observations for each Geogebra file.

Sep 20-11:25 AM

Familiarizing with the Sine ratio - Kuta

Familiarizing with the Cosine ratio - Kuta

Can you choose the correct ratio? - Self assess

Word problems with a group.

Sep 20-11:56 AM