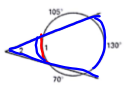
October 29, 2018, Monday

20. Find angles 1 and 2.



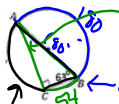
360 − 105 − 130 − 70 = 55

∠1 = 55, ∠2 = 37.5

$\angle 2 = \frac{1}{2}(130 - 55)$

If $m\angle ABC = 63°$, find all three arc measures.

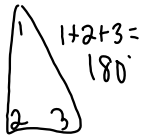
21. $\overset{\frown}{AB}$ = 180, 22. $\overset{\frown}{BC}$ = 54, 23. $\overset{\frown}{AC}$ = 126



180 − 63 = 27

← diameter/line = 180°

360 − 54 − 180



1 + 2 + 3 = 180°

Oct 26-8:13 AM

Discuss - draw

What are the 5 circle - angle arc formulas you know?

1

2

3

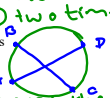
4

5

Oct 26-8:41 AM

What is a chord? A line that touches the circumference of a ⊙ two times

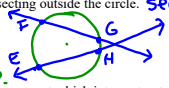
Draw a circle with two intersecting chords



CHORDS: AD ; BC

What is a secant segment? A line the passes through the circumference of a circle two times,

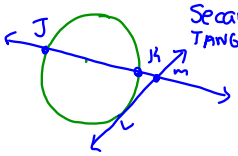
Draw a circle with 2 secant segments which intersecting outside the circle.



SECANTS: FG ; EH

What is a tangent segment? A line that touches the circumference of a ⊙ ONE Time.

Draw a circle with a secant segment and a tangent segment which intersect outside the circle.



Secant: JK

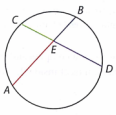
TANGENT: LM

Oct 26-2:56 PM

Geometry - Circles & chords, secants, tangents

Chord-Chord Product Theorem

If two chords intersect inside a circle, then the products of the lengths of the segments of the chords are equal.



$AE \cdot EB = CE \cdot ED$

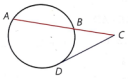
Secant-Secant Product Theorem

If two secants intersect in the exterior of a circle, then the product of the lengths of one secant segment and its external segment equals the product of the lengths of the other secant segment and its external segment.

$AE \cdot BE = CE \cdot DE$

Secant-Tangent Product Theorem

If a secant and a tangent intersect in the exterior of a circle, then the product of the lengths of the secant segment and its external segment equals the length of the tangent segment squared.



$AC \cdot BC = DC^2$

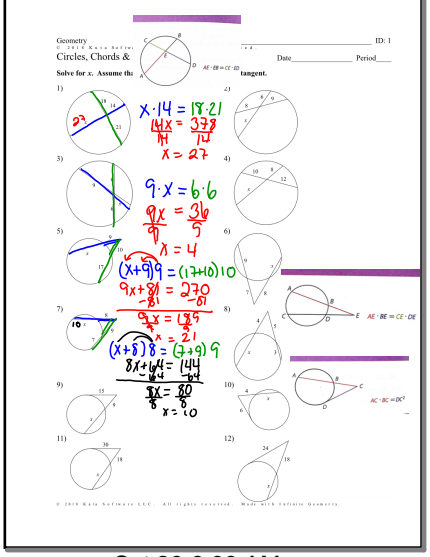
Oct 26-8:38 AM

Geometry

Circles, Chords &

Solve for x. Assume th tangent.

Date Period ID: 1



1) $x \cdot 14 = 18 \cdot 21$, $\frac{14x}{14} = \frac{378}{14}$, $x = 27$

3) $9 \cdot x = 6 \cdot 6$, $\frac{9x}{9} = \frac{36}{9}$, $x = 4$

5) $(x+9)9 = (17+10)10$, $9x + 81 = 270$, $-81 \quad -81$, $\frac{9x}{9} = \frac{189}{9}$, $x = 21$

7) $(x+8)8 = (7+9)9$, $8x + 64 = 144$, $-64 \quad -64$, $\frac{8x}{8} = \frac{80}{8}$, $x = 10$

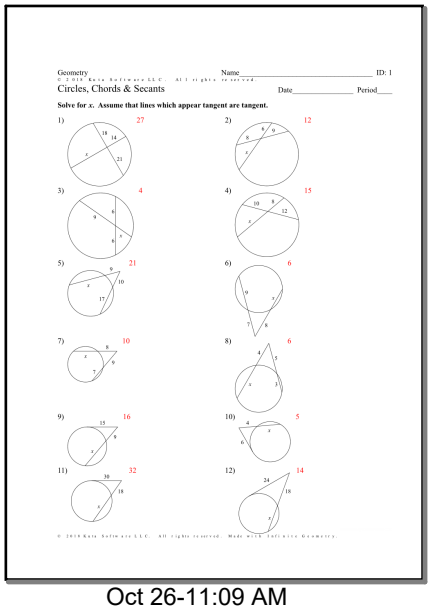
Oct 26-8:38 AM

9) $(x+9)9 = 15^2$, $9x + 81 = 225$, $-81 \quad -81$, $\frac{9x}{9} = \frac{144}{9}$, $x = 16$

11) $(x+18)18 = 30^2$, $18x + 324 = 900$, $-324 \quad -324$, $\frac{18x}{18} = \frac{576}{18}$, $x = 32$

10) $AC \cdot BC = DC^2$

Oct 29-1:38 PM


Geometry Name_____ ID: 1
Circles, Chords & Secants Date_____ Period____
Solve for x. Assume that lines which appear tangent are tangent.
1) 27 2) 12
3) 4 4) 15
5) 21 6) 6
7) 10 8) 6
9) 16 10) 5
11) 32 12) 14

Oct 26-11:09 AM

On a new sheet of paper (you can 1/2 with someone).

Write 3 circle problems, using your new chord, tangent, secant rules.

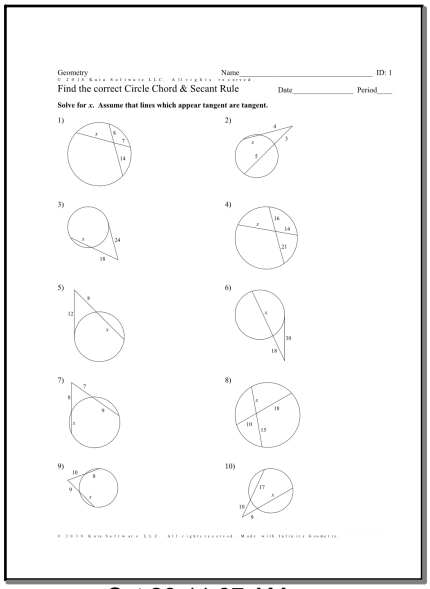
Turn these in!!

Oct 29-1:43 PM

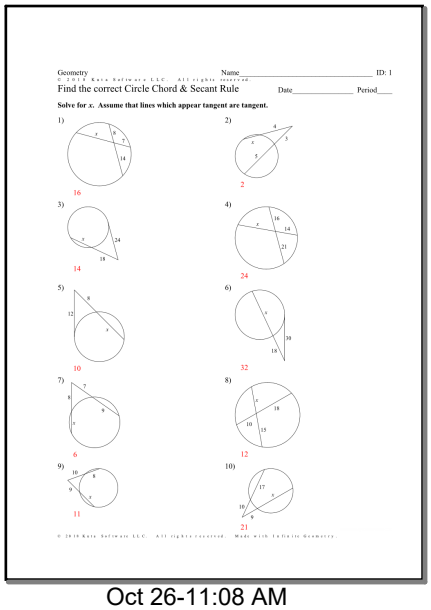
October 30, 2018, Tuesday

From you notes - write one of the 'new' circle rules we covered yesterday (circles with chords, secants, and tangents).

Oct 26-8:23 AM

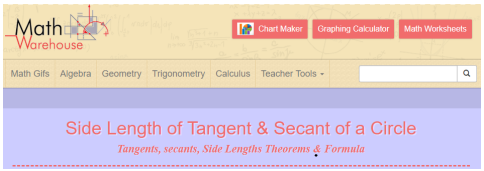

Geometry Name_____ ID: 1
Find the correct Circle Chord & Secant Rule Date_____ Period____
Solve for x. Assume that lines which appear tangent are tangent.

Oct 26-11:07 AM


Geometry Name_____ ID: 1
Find the correct Circle Chord & Secant Rule Date_____ Period____
Solve for x. Assume that lines which appear tangent are tangent.
1) 16 2) 2
3) 14 4) 24
5) 10 6) 32
7) 6 8) 12
9) 11 10) 21

Oct 26-11:08 AM

https://www.mathwarehouse.com/geometry/circle/tangent-secant-side-length.php



Review the three rules, then try each problem BEFORE you look at the answer!

Oct 26-11:10 AM

October 31, 2018, Wednesday

Solve for x. Assume that lines which appear tangent are tangent.

1)

2)

3)

You have 3 chord, secant, tangent rules relating to a circle...
how will you remember these for the EOC?

Oct 26-8:23 AM

What is circumference? The length around the circle.

Draw a pic of circumference.

Find C if r = 2.

Circumference

radius

What is 1/2 of the circumference? 1/4? 3/4?

semi circle

How many degrees are 1/2, 1/4, 3/4, & 1 around a circle?

Look at p730 (copy) what is m??

Oct 26-2:57 PM

Arc Length

The arc length, s, of an arc with measure $m°$ and radius r is given by the formula $s = \frac{m}{360} \cdot 2\pi r$.

Find Circumference

Find the arc length

piece of the Circumference

Oct 26-2:54 PM

Geometry Name ID: 1

Circle circumference to arc length Date Period

Find the diameter of each circle. Round your answer to the nearest tenth.

1)

Find the radius of each circle. Round your answer to the nearest tenth.

2)

Find the circumference of each circle. Use your calculator's value of π. Round your answer to the nearest tenth.

3)

4)

Oct 26-11:15 AM

Find the length of each arc. Round your answers to the nearest tenth. Remember arc length is a 'piece' of the circumference.

5)

6)

7)

8)

9)

10)

11)

12)

Oct 26-11:16 AM

Geometry Name ID: 1

Circle circumference to arc length Date Period

Find the diameter of each circle. Round your answer to the nearest tenth.

1)

6 km

Find the radius of each circle. Round your answer to the nearest tenth.

2)

12 yd

Find the circumference of each circle. Use your calculator's value of π. Round your answer to the nearest tenth.

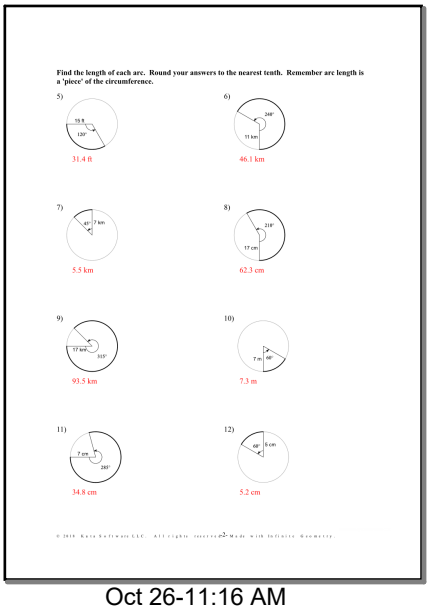
3)

18.8 km

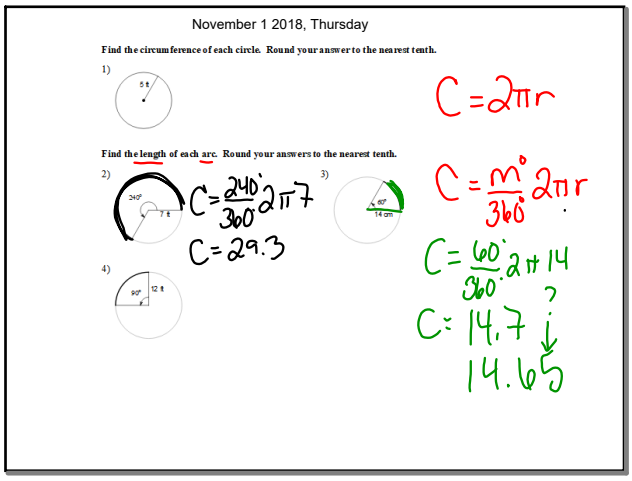
4)

38.3 m

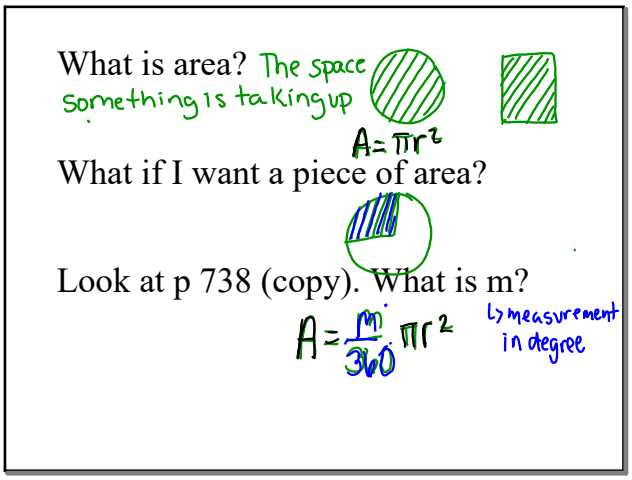
Oct 26-11:16 AM



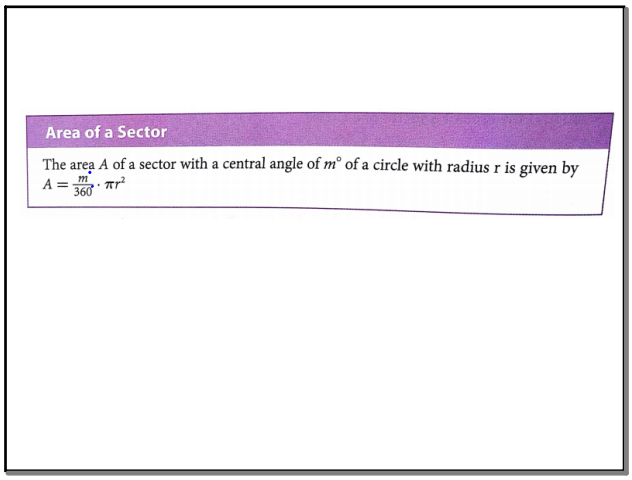
Oct 26-11:16 AM



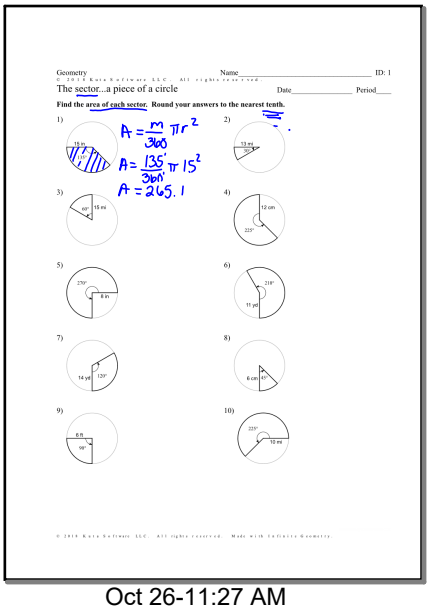
Oct 26-8:23 AM



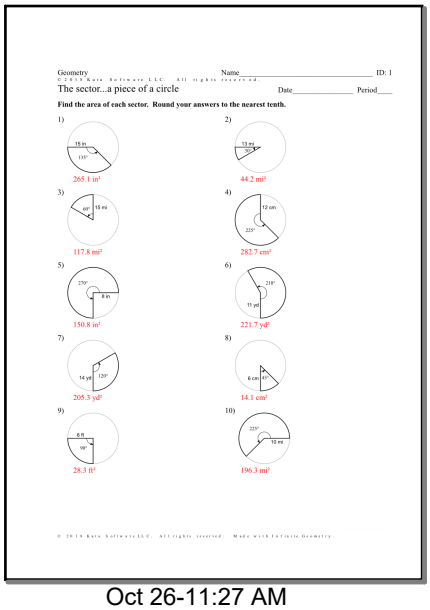
Oct 30-1:40 PM



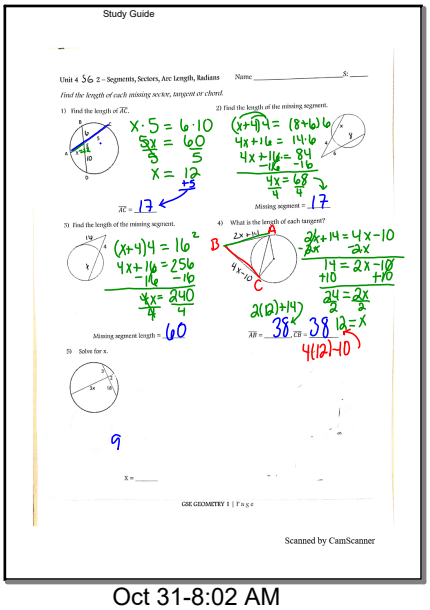
Oct 26-2:55 PM



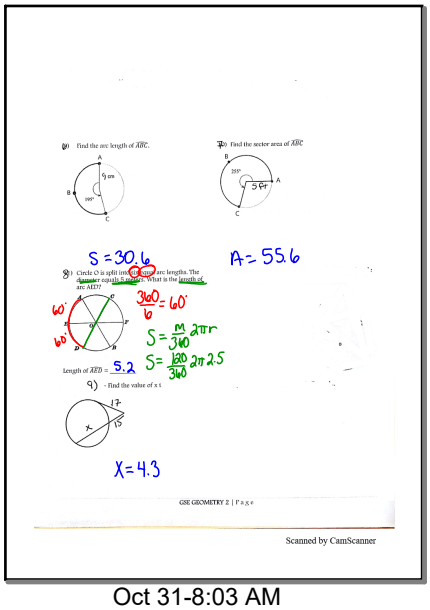
Oct 26-11:27 AM



Oct 26-11:27 AM



Oct 31-8:02 AM



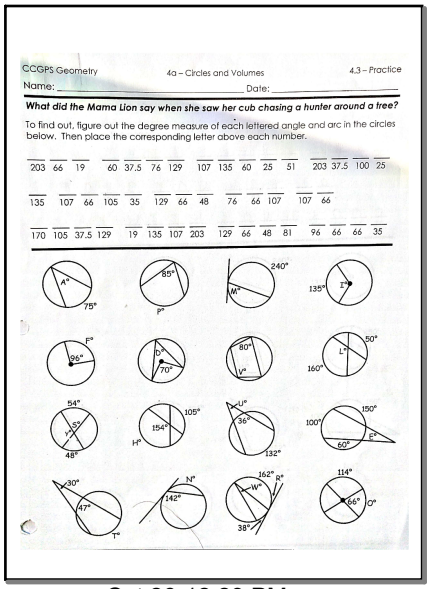
Oct 31-8:03 AM

November 2, 2018, Friday

What are two formulas you will probably use on the quiz today?
Write the formula and an example of a problem the formula will work for.

quiz

Oct 26-8:23 AM



Oct 26-12:23 PM