

MYP Math 9 - Standard Level

## Finals Day

1. Unit 4 Test: Radicals, Special Rights, and Unit circle (8 pts)

\*Opportunity to improve Quiz 4.1 score

2. Semester 1 Final Exam (8 pts)

\*32 questions Multiple Choice

(8 from each unit)

\*Unit 1 Linear

\*Unit 2 Coordinate Geometry

\*Unit 3 Similarity & Trigonometry

\*Unit 4 Radicals, Special Rights, Transformations

## Final's schedule:

**FIRST SEMESTER / SECOND  
QUARTER FINALS  
2017-18  
SPECIAL Bell Schedule**

**Tuesday, January 23, 2018**

- Four Period day.
- Lunch with period 3 teacher.
- One hour, 25 minute classes

Period 1: Study Hall	8:05-9:30
Period 2	9:40-11:05
Period 3	11:15-1:10*
<i>*Lunch to be determined</i>	
Period 4	1:20-2:45

**Wednesday, January 24, 2018**

- Four Period day.
- Lunch with period 6 teacher.
- One hour, 25 minute classes

Period 1: Finals	8:05-9:30
Period 5	9:40-11:05
Period 6	11:15-1:10*
<i>*Lunch to be determined</i>	
Period 7	1:20-2:45

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## Class Plan:

Warm-up Unit 4

Warm-up Unit 3

Review:

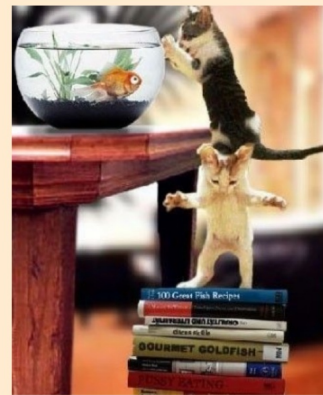
Unit 4 Radicals and Special Right Triangles

Unit 3 Similarity and Trigonometry

Study & Work Together!

Done?

Help others & Review Semester 1 Topics



## ADVISORY BELL SCHEDULE (w/3 lunches)

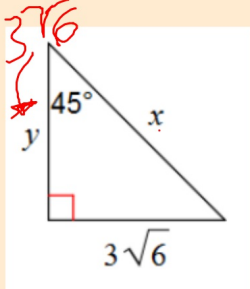
<b>Lunch A</b>		
1st Hour	8:05-8:48	43 minutes
2nd Hour	8:53-9:36	43 minutes
Advisory	9:41-10:25	44 minutes
3rd Hour	10:30-11:13	43 minutes
<b>Lunch A</b>	11:18-11:48	30 minutes
4th Hour (Late)	11:53-12:36	43 minutes
5th Hour (Late)	12:41-1:24	43 minutes
6th Hour	1:29-2:12	43 minutes
7th Hour	2:17-3:00	43 minutes

<b>Lunch B</b>		
1st Hour	8:05-8:48	43 minutes
2nd Hour	8:53-9:36	43 minutes
Advisory	9:41-10:25	44 minutes
3rd Hour	10:30-11:13	43 minutes
4th Hour (Early)	11:18-12:01	43 minutes
<b>Lunch B</b>	12:06-12:36	30 minutes
5th Hour (Late)	12:41-1:24	43 minutes
6th Hour	1:29-2:12	43 minutes
7th Hour	2:17-3:00	43 minutes

<b>Lunch C</b>		
1st Hour	8:05-8:48	43 minutes
2nd Hour	8:53-9:36	43 minutes
Advisory	9:41-10:25	44 minutes
3rd Hour	10:30-11:13	43 minutes
4th Hour (Early)	11:18-12:01	43 minutes
5th Hour (Early)	12:06-12:49	43 minutes
<b>Lunch C</b>	12:54-1:24	30 minutes
6th Hour	1:29-2:12	43 minutes
7th Hour	2:17-3:00	43 minutes

## Warm-up: Special Right Triangles

Solve for the unknown side lengths. Leave answer in simplest radical form.



① Spec. rts! (Unit 4)

$$x = 376 \cdot \sqrt{2}$$

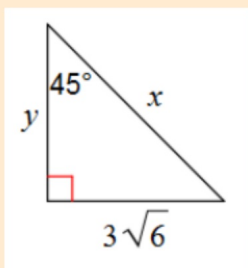
$$x = 371\sqrt{2} = 374.3$$

$$\boxed{x = 673}$$

How many ways could we solve for  $x$  and  $y$ ?

### Warm-up: Special Right Triangles

Solve for the unknown side lengths. Leave answer in simplest radical form.



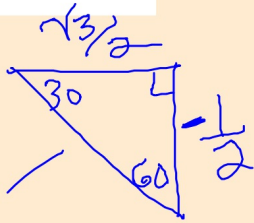
How many ways could we solve for  $x$  and  $y$ ?

- 1) Pythagorean theorem (unit 2)
- 2) Right triangle trig (unit 3)
- 3) Special Right triangles (unit 4)

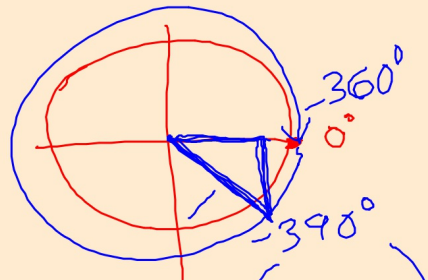
## Warm-up: The Unit Circle

Find the exact value of the trigonometric function.

$$\tan -390^\circ$$



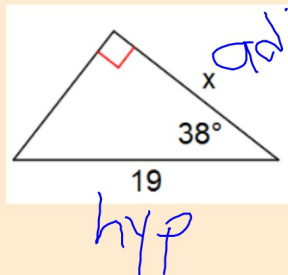
$$\tan(-30^\circ) = \frac{-\frac{1}{2}}{\frac{\sqrt{3}}{2}}$$



$$\begin{aligned} \frac{-\frac{1}{2}}{\frac{\sqrt{3}}{2}} &= -\frac{1}{\sqrt{3}} \left( \frac{\sqrt{3}}{\sqrt{3}} \right) \\ &= \frac{-\sqrt{3}}{3} \end{aligned}$$

Warm-up: Trigonometry (definition: relationship between angles/sides)

Solve for the unknown side length. Round to the nearest tenth.



$$\cos(38^\circ) = \frac{x}{19}$$

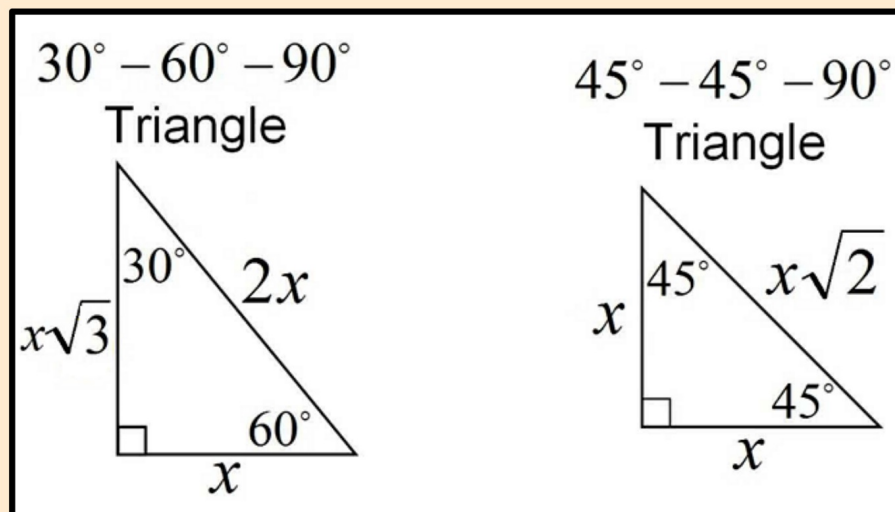
$$x = 19(\cos(38^\circ))$$

$$x \approx 15.0$$



\*Unit 4 Radicals/Special Right Triangles

Special Right Triangles



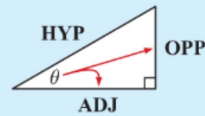
## \*Unit 3 Similarity and Trigonometry

### Chapter 13 - Trigonometry

These ratios have the traditional names **sine**, **cosine**, and **tangent** respectively. We abbreviate them to **sin**, **cos**, and **tan**.

In any right angled triangle with one angle  $\theta$ , we have:

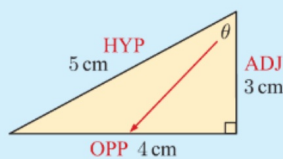
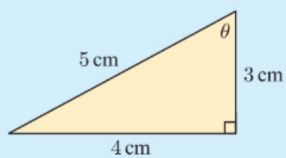
$$\sin \theta = \frac{\text{OPP}}{\text{HYP}}, \quad \cos \theta = \frac{\text{ADJ}}{\text{HYP}}, \quad \tan \theta = \frac{\text{OPP}}{\text{ADJ}}$$



SOH CAH TOA

#### Example 2

For the given triangle, find  $\sin \theta$ ,  $\cos \theta$ , and  $\tan \theta$ .



$$\sin \theta = \frac{\text{OPP}}{\text{HYP}} = \frac{3}{5}$$

$$\cos \theta = \frac{\text{ADJ}}{\text{HYP}} = \frac{4}{5}$$

$$\tan \theta = \frac{\text{OPP}}{\text{ADJ}} = \frac{3}{4}$$

#### Self Tutor

Exercises...

Work on Unit 3 & 4 Reviews

You can do it!!!

