

Homework grades this week:

01: **Read** sections 5.3 and 5.4 in your textbook (and 5.2 if you haven't already) **by Monday 22 Aug.**

02: Complete at least 45 minutes of exercises on **Khan Academy** related to sections 5.2, 5.3, and 5.4 **by Friday, 26 Aug**; in addition, complete "Mastery Challenges" as often as they become available to you.

03: **Textbook problems**, mostly be completed in class and due **Friday, 26 Aug.**

- 5.2: #1-6 all; 15-41 odd; 59-75 odd (NO CALCULATOR!)
- 5.3: #1-35 odd; 37-48 all (NO CALCULATOR!); 61-68 all (NO CALCULATOR!)
- 5.4: #13-22 all (NO CALCULATOR!)

Expect a **quiz** sometime this week on some combination of radians & degrees, arc length & angular speed, trigonometric functions, 30-60-90 & 45-45-90 triangles.

Test #1 - Next week! What day?


Friday! 2 SEPT


Khan Academy exercises for section 5.1:

 arc measure

 arc length


 radians & degrees


 radians & arc length


 complementary & supplementary angles

 multiple units word problems

 convert units (metrics)

 convert units word problems (metrics)

 convert units (US customary)

 convert units word problems (US customary)

Khan Academy exercises for section 5.2:

- Trigonometric ratios in right triangles
- Solve for a side in right triangles
- Solve for an angle in right triangles
- Right triangle word problems

Khan Academy exercises for section 5.3-5.4:

- Trig values of special angles
- Use the Pythagorean identity

$$\cot \frac{3\pi}{4} = \boxed{-1}$$

$$\sec \frac{7\pi}{4} = \sqrt{2}$$

$$\csc \left(-\frac{2\pi}{3} \right) = \boxed{-\frac{2}{\sqrt{3}}} = -\frac{2\sqrt{3}}{3}$$

$$\csc \frac{3\pi}{2} = -1$$

$$\sin \frac{4\pi}{3} = -\frac{\sqrt{3}}{2}$$

$$\tan \frac{7\pi}{6} = \frac{1}{\sqrt{3}}$$

Evaluate the following:

- 1. $\sin 135^\circ$
- 2. $\tan \frac{11\pi}{6}$
- 3. $\csc \frac{5\pi}{4}$
- 4. $\cot(-450^\circ)$
- 5. $\cos \frac{2\pi}{3}$
- 6. $\cos 53\pi$

