

Precalculus:

Homework  
1/2-1/5

due: : Wednesday: read pp. 471-472

1. pp. 475-477 / #5, 8, 57, 58
2. Simplify completely:
  - a.  $2\sin 9x \cos 9x$
  - b.  $1 - 2\sin^2 7x$
  - c.  $\frac{2\tan 3y}{1 - \tan^2 3y}$
3. If  $\tan \theta = \frac{3}{4}$  and  $\theta$  is a positive acute angle, find:
  - a.  $\sin 2\theta$
  - b.  $\cos 2\theta$
  - c.  $\tan 2\theta$

Thursday: read pp. 473-475

1. pg. 475 / #31, 33, 35
2. Simplify completely:
  - a.  $\sqrt{\frac{1 + \cos 5x}{2}}$
  - b.  $\sqrt{\frac{1 - \cos 4x}{1 + \cos 4x}}$
  - c.  $\sqrt{\frac{1 - \cos 10r}{2}}$
3. If  $\sec \theta = \frac{5}{4}$  and  $\theta$  is an angle in the fourth quadrant, find:
  - a.  $\sin \frac{1}{2}\theta$
  - b.  $\cos \frac{1}{2}\theta$
  - c.  $\tan \frac{1}{2}\theta$

on: Friday: test