

Precalculus:

Homework
12/4-12/8

due: Tuesday: read pp. 362-363

1. If $\tan x = -\frac{4}{7}$ and $\cos x < 0$, find $\csc x$.
2. If $\sin x = \frac{8}{17}$ and $\sec x > 0$, find $\cot x$.
3. If $\cos x = -\frac{5}{6}$ and $\cot x > 0$, find $\sin x$.
4. Find the reference angle for each given angle.
a. 159° b. 312° c. -98° d. 530° e. -415°

Wednesday: read pp. 361-363

Express as a function of a positive acute angle:

- | | | | |
|---------------------|---------------------|---------------------|---------------------|
| 1. $\tan 137^\circ$ | 3. $\sin 193^\circ$ | 5. $\cot 302^\circ$ | 7. $\sin 561^\circ$ |
| 2. $\sec 341^\circ$ | 4. $\cos 259^\circ$ | 6. $\csc 98^\circ$ | 8. $\tan 443^\circ$ |

Thursday: read pp. 361-362

Find the exact value of:

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|---------------------------------------|---|
| 1. $\sin\left(\frac{11\pi}{2}\right)$ | 6. $2\sin\left(\frac{\pi}{3}\right) - 3\tan\left(\frac{\pi}{6}\right)$ |
| 2. $\tan(6\pi)$ | 7. $3\csc 30^\circ + 4\sec 60^\circ$ |
| 3. $5\sec(8\pi)$ | 8. $\sin 45^\circ + \sin 135^\circ + \sin 225^\circ$ |
| 4. $\sin 90^\circ + \tan 45^\circ$ | 9. $6\tan\left(\frac{\pi}{3}\right) - 5\cot\left(\frac{3\pi}{4}\right)$ |
| 5. $(6\cot 135^\circ)(\cos 30^\circ)$ | 10. $(4\cos\frac{5\pi}{6})(\csc\frac{7\pi}{6})$ |

Friday:

1. Find the measure of acute angle A:
a. $\sin(5A+10)^\circ = \cos(3A-40)^\circ$ b. $\sec 2A^\circ = \csc(60-A)^\circ$
2. Write as a function of a positive acute angle:
a. $\sin(-157^\circ)$ c. $\cos(-215^\circ)$ e. $\csc(-510^\circ)$
b. $\tan(-31^\circ)$ d. $\cot(-150^\circ)$ f. $\sec(-87^\circ)$
3. Find the exact value of:
a. $2\sin(-240^\circ)$ b. $8\cos(-270^\circ)$ c. $\sec(-300^\circ)$ d. $-8\tan(-150^\circ)$

Monday: read pp. 414-420

pp. 421-422 / #2, 5, 7, 8, 11, 12, 23, 25, 28, 31, 32, 41