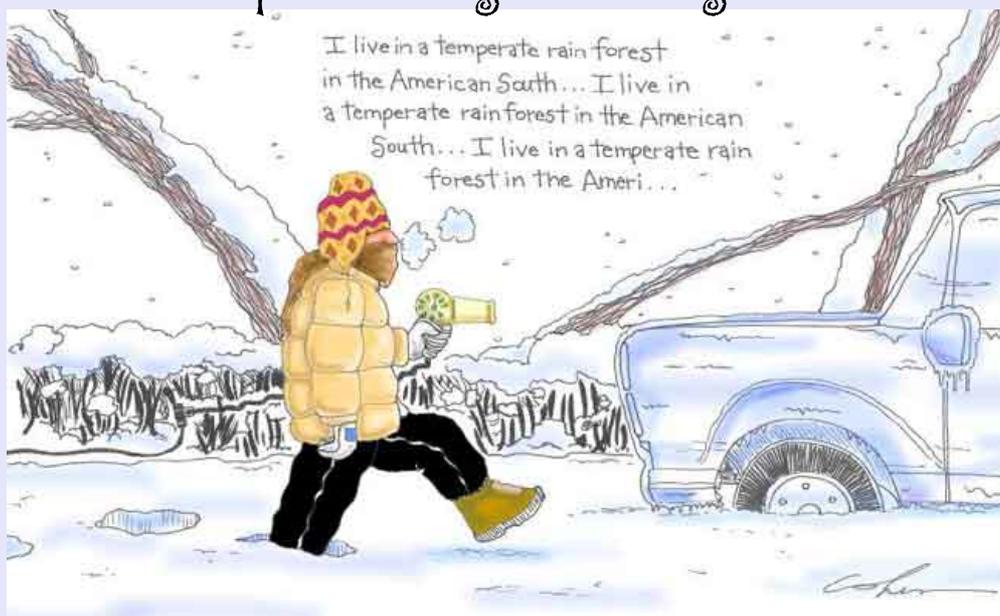


Special Right Triangles



Dec 3-8:15 AM

Ditto 5.1 #1-20

1. -1 2. 0 3. 0 4. 0 5. 0

6. 0 7. 0 8. 1 9. 0 10. 0

11. $\sin t = \frac{\sqrt{5}}{5}$ $\cos t = -\frac{2\sqrt{5}}{5}$ $\tan t = -\frac{1}{2}$

12. $\sin t = -\frac{3\sqrt{10}}{10}$ $\cos t = \frac{\sqrt{10}}{10}$ $\tan t = -3$

13. $\sin t = -\frac{4}{5}$ $\cos t = -\frac{3}{5}$ $\tan t = \frac{4}{3}$

14. $\sin t = -0.8$ $\cos t = 0.6$ $\tan t = -4/3$

15. $\sin t = \frac{7\sqrt{53}}{53}$ $\cos t = \frac{2\sqrt{53}}{53}$ $\tan t = \frac{7}{2}$

16. $\sin t = \frac{2\sqrt{13}}{13}$ $\cos t = -\frac{3\sqrt{13}}{13}$ $\tan t = -\frac{2}{3}$

17. $\sin t = -\frac{6\sqrt{61}}{61}$ $\cos t = -\frac{5\sqrt{61}}{61}$ $\tan t = \frac{6}{5}$

18. $\sin t = -\frac{3}{5}$ $\cos t = \frac{4}{5}$ $\tan t = -\frac{3}{4}$

19. $\sin t = -\frac{10\sqrt{103}}{103}$ $\cos t = \frac{\sqrt{309}}{103}$ $\tan t = -\frac{10\sqrt{3}}{3}$

20. $\sin t = \frac{2\sqrt{\pi^2+4}}{\pi^2+4}$ $\cos t = -\frac{\pi\sqrt{\pi^2+4}}{\pi^2+4}$ $\tan t = -\frac{2}{\pi}$



Dec 4-2:01 PM

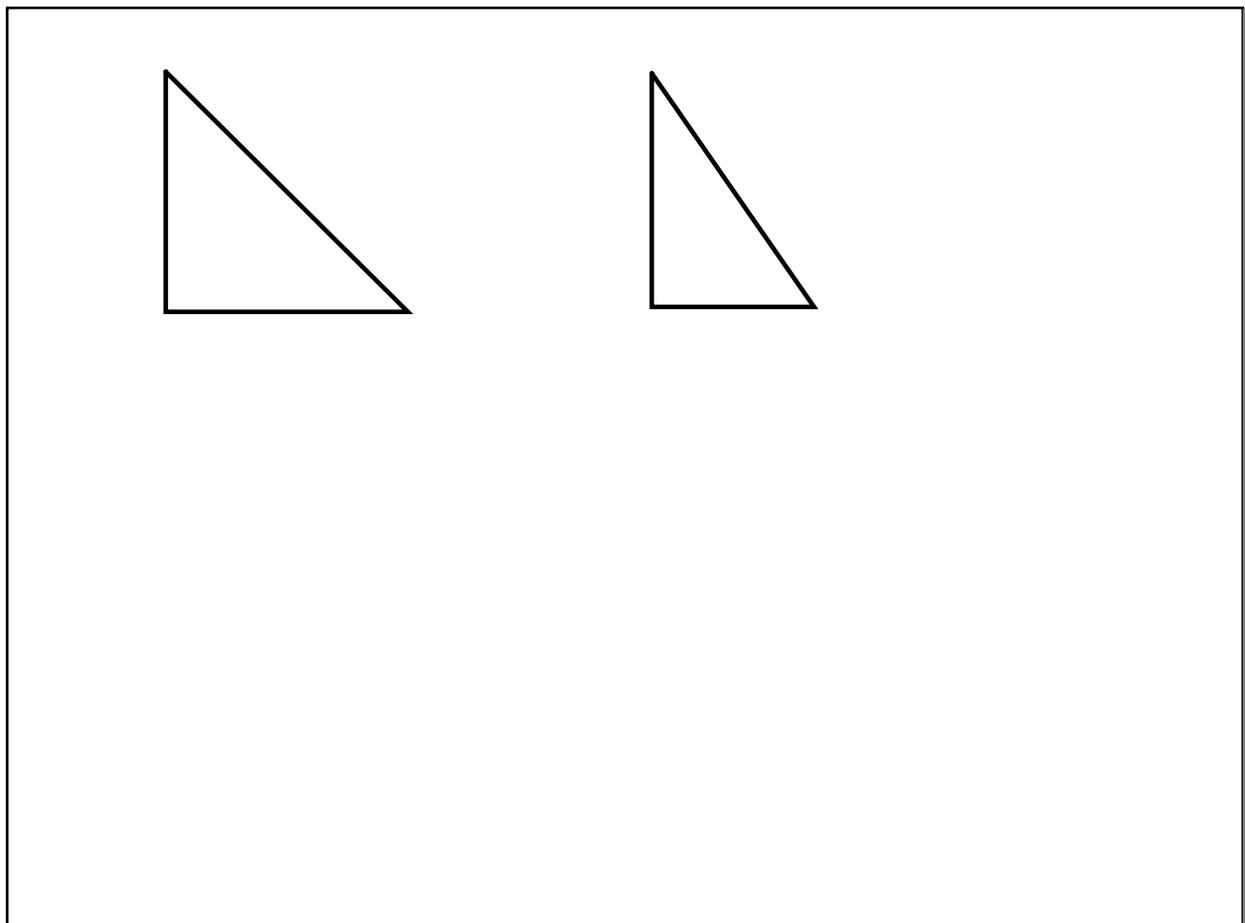
You must have this table memorized!

Unit Circle $r=1$

	0	$\frac{\pi}{6}$	$\frac{\pi}{4}$	$\frac{\pi}{3}$	$\frac{\pi}{2}$
Y sin	0	$\frac{1}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{\sqrt{3}}{2}$	1
X cos	1	$\frac{\sqrt{3}}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{1}{2}$	0
$\frac{Y}{X}$ tan	0	$\frac{\sqrt{3}}{3}$	1	$\sqrt{3}$	undefined

$\frac{1}{2} / \frac{\sqrt{3}}{2} = \frac{1}{\sqrt{3}}$ $\frac{\sqrt{3}}{2} / \frac{1}{2} = \sqrt{3}$

Dec 3-8:17 AM



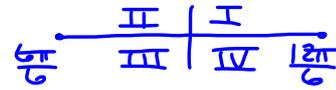
Dec 19-12:32 PM

Determine the EXACT value → No Decimals, No Calculators

- 1st - Find the reference angle *Always be either $\frac{\pi}{6}, \frac{\pi}{4}, \frac{\pi}{3}$*
 2nd - Use your circle to find the quadrant
 3rd - Write the ratio in simplified radical form with the correct + or - sign

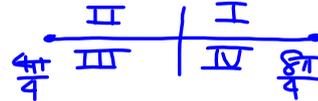
1. $\sin \frac{11\pi}{6} : -\sin \frac{\pi}{6} : -\frac{1}{2}$
 $\alpha : \frac{\pi}{6}$ QIV

5. $\sin \frac{3\pi}{4}$
 $\alpha : \frac{\pi}{4}$



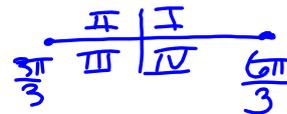
2. $\cos \frac{4\pi}{3} : -\cos \frac{\pi}{3} : -\frac{1}{2}$
 $\alpha : \frac{\pi}{3}$ QIII

6. $\cos \left(-\frac{2\pi}{3}\right)$
 $\alpha : \frac{\pi}{3}$



3. $\sin \left(-\frac{7\pi}{6}\right) = +\sin \frac{\pi}{6} = \frac{1}{2}$
 $\alpha : \frac{\pi}{6}$ QII

7. $\tan \left(-\frac{5\pi}{4}\right)$
 $\alpha : \frac{\pi}{4}$



4. $\tan \frac{5\pi}{6}$
 $\alpha : \frac{\pi}{6}$

Dec 3-8:18 AM

Substitute the values & simplify → No decimals, No calculators

1. $\cos \frac{\pi}{2} \cos \frac{\pi}{4} - \sin \frac{\pi}{2} \sin \frac{\pi}{4}$

2. $\sin \frac{4\pi}{3} \cos \frac{5\pi}{6} - \cos \frac{4\pi}{3} \sin \frac{5\pi}{6}$

Dec 3-8:19 AM



Homework:
WS 5.1: 21 - 33

Dec 3-8:20 AM