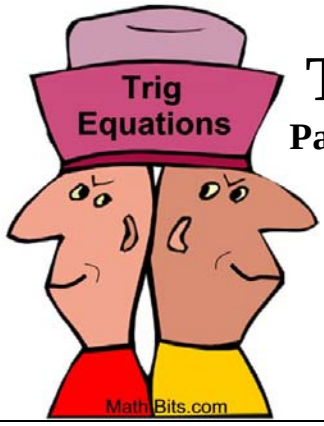

Trig Tangles

Pair Share with a Twist

Name_____(left)

Name_____(right)

Directions: *You and your partner will work together to solve these trigonometry equations. You solve the problems on the left and your partner will solve the problems on the right. When you are done, your answers will match - but the answers are NOT in the same order in both columns.*

1. What value of θ in the domain of $0 \le \theta \le \frac{\pi}{2}$, satisfies $2\cos^2\theta - 1 = 0$?	1. Find a value for θ in the domain of $\pi \le \theta \le 2\pi$ that satisfies $2\cos\theta + \sqrt{3} = 0$.
2. What is the largest angle θ in radians, $0 \le \theta \le 2\pi$, that satisfies $2\cos\theta - 4 = -3$?	2. Find θ such that $0 \le \theta \le 2\pi$, when $3\sin\theta - 4 = -1$.
3. How many values of θ, where $0 \le \theta \le 2\pi$, satisfies the equation $4\cos^2\theta - 1 = 0$?	3. What angle θ, in the interval $\pi \le \theta \le 2\pi$, satisfies the equation $2\tan\theta + 2\sqrt{3} = 0$?
4. In the interval $\frac{\pi}{2} \le \theta \le \frac{3\pi}{2}$, what values of θ will satisfy the equation $\sin^2\theta + 4\sin\theta = 0$?	4. How many values of θ, in the domain of $0 \le \theta \le 2\pi$ will satisfy the equation $\tan^2\theta + \tan\theta - 2 = 0$?

5. How many values of θ, in the interval $0 \le \theta \le 2\pi$, satisfy the equation $2\sin^2\theta + \sin\theta - 1 = 0$?	5. What is the smallest positive angle in radians that satisfies the equation $4\tan\theta - 3 = \tan\theta$?
6. If $2\cos A + 6 = 6$, find A in the interval $0 \le A \le \pi$.	6. In the interval of $\frac{\pi}{2} \le \theta \le \frac{3\pi}{2}$, find a value of θ that satisfies the equation $2\cos^2\theta - 1 = 1$.
7. Find a value for θ in the interval of $\frac{\pi}{2} \le \theta \le \frac{3\pi}{2}$ that satisfies the equation $2\sin\theta + 1 = 0$?	7. What value(s) of A in the interval of $0 \le A \le \pi$ satisfies the equation $4\cos A + 4 = 2$?
8. For what value(s) of x in the interval of $0 \le x \le \pi$ is the equation $2\tan x + 2\sqrt{3} = 0$?	8. How many values of θ in the interval of $0 \le \theta \le 2\pi$ will satisfy the equation of $3\cos^2\theta + 4\cos\theta + 1 = 0$?