TRIG DEFINITIONS & IDENTITIES YOU MUST KNOW

You are supposed to already know these, so do NOT use this as a reference sheet.

$$\tan\theta \equiv \frac{\sin\theta}{\cos\theta} \tag{1}$$

$$\cot\theta \equiv \frac{\cos\theta}{\sin\theta} \tag{2}$$

$$\sec\theta \equiv \frac{1}{\cos\theta} \tag{3}$$

$$\csc\theta \equiv \frac{1}{\sin\theta} \tag{4}$$

$$\cos^2\theta + \sin^2\theta = 1 \tag{5}$$

$$1 + \tan^2\theta = \sec^2\theta \tag{6}$$

$$1 + \cot^2\theta = \csc^2\theta \tag{7}$$

$$\cos(-\theta) = \cos\theta \tag{8}$$

$$\sin(-\theta) = -\sin\theta \tag{9}$$

$$\sin 2\theta = 2\,\sin\theta\cos\theta \tag{10}$$

$$\cos^2\theta = \frac{1}{2}\,(1 + \cos 2\theta) \tag{11}$$

$$\sin^2\theta = \frac{1}{2}\,(1 - \cos 2\theta) \tag{12}$$

Other Trig Identities We Advise You to Know

$$\sin(x \pm y) = \sin x\,\cos y \pm \cos x\,\sin y \tag{13}$$

$$\cos(x \pm y) = \cos x\,\cos y \mp \sin x\,\sin y \tag{14}$$

REVIEW THESE FREQUENTLY.
Make Flash Cards?