

Warm-up #8: Verifying

1. $\tan^2\theta - \tan^2\theta\sin^2\theta = \sin^2\theta$

$$\tan^2\theta(1 - \sin^2\theta)$$

$$\tan^2\theta \cdot \cos^2\theta$$

$$\frac{\sin^2\theta \cdot \cos^2\theta}{\cos^2\theta}$$

$$\sin^2\theta \checkmark$$

2. $\sin^4\theta + 2\sin^2\theta\cos^2\theta + \cos^4\theta = 1$

$$(\sin^2\theta + \cos^2\theta)^2$$

$$1^2$$
$$\boxed{1} \checkmark$$

or

$$(\sin^2\theta + \cos^2\theta)(\sin^2\theta + \cos^2\theta)$$

$$(1)(1)$$

$$\boxed{1} \checkmark$$