Pre-AP Pre-Cal

Identities Quiz A

Name _____ Date _____

1. For all values of x for which the expressions are defined, $\sec x - \tan x$ is equivalent to

a) 1 b) $\cos x - \cot x$ c) $\dfrac{1-\sin x}{\cos x}$ d) $\dfrac{\cos x - \sin^2 x}{\sin x \cos x}$

2. The expression $\dfrac{\sin^2 x + \cos^2 x}{\sin x}$ is equivalent to

a) $\csc x$ b) $\sec x$ c) $\sin x \cot x$ d) $\sin x \cos x \cot x$

3. The expression $\cos y(\csc y - \sec y)$ is equivalent to

a) $\cot y - 1$ b) $\tan y - 1$ c) $1 - \tan y$ d) $-\cos y$

4. The expression $(\cot\theta)(\sec\theta)$ is equivalent to

a) $\tan\theta$ b) $\cos\theta$ c) $\cot\theta$ d) $\csc\theta$

5. For all value of θ for which the expression is defined, $\dfrac{\sec\theta}{\csc\theta}$ is equivalent to

a) $\sin\theta$ b) $\cos\theta$ c) $\tan\theta$ d) $\cot\theta$

6. The expression $\dfrac{1-\sin^2 A}{2\cos A}$ is equivalent to

a) $\dfrac{\sin A}{2}$ b) $\dfrac{\cos A}{2}$ c) $\cos\frac{1}{2}A$ d) $2\cos A$

7. For all values of x for which the expression is defined, $\sec x \cdot \csc x \cdot \cos x$ is equivalent to

a) $\tan x$ b) $\sin x$ c) $\dfrac{1}{\sin x}$ d) $\dfrac{1}{\cos x}$

8. The expression $\sec^2\theta + \csc^2\theta$ is equivalent to

a) $1 - \tan^2\theta$ b) $1 + \tan^2\theta$ c) $\dfrac{1}{\sin^2\theta\cos^2\theta}$ d) $\sin^2\theta\cos^2\theta$

9. The expression $\dfrac{\sin^2 B}{\cos B} + \cos B$ is equivalent to

a) 1 b) $\dfrac{1}{\cos B}$ c) $\dfrac{1}{\sec B}$ d) $\sin^2 B$

10. The expression $\cos\theta(\sec\theta - \cos\theta)$ is equivalent to

a) 1 b) $\sin\theta$ c) $\sin^2\theta$ d) $-\cos^2\theta$

11. Expressed in the simplest form, $\csc\theta \cdot \tan\theta \cdot \cos\theta$ is equivalent to

a) 1 b) $\sin\theta$ c) $\cos\theta$ d) $\tan\theta$

12. The expression $\sin\theta\ (\cot\theta\ - \csc\theta)$ is equivalent to

a) $\cos\theta\ - \sin^2\theta$ b) $2\cos\theta$ c) $-\sin\theta$ d) $\cos\theta\ - 1$

13. The expression $\dfrac{\sin x \bullet \cos x}{\tan x}$ is equivalent to

a) 1 b) $\sin^2 x$ c) $\cos x$ d) $\cos^2 x$

Verify each identity.

14. $\dfrac{1}{1-\cos\theta} - \dfrac{1}{1+\cos\theta} = 2\csc\theta\cot\theta$

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Answer List

1.	c	2.	a	3.	a
4.	d	5.	c	6.	b
7.	c	8.	c	9.	b
10.	c	11.	a	12.	d
13.	d	14.			

Catalog List

1.	NY1 HE 8	2.	NY1 HE 24	3.	NY1 HE 35
4.	NY1 HE 38	5.	NY1 HE 52	6.	NY1 HE 104
7.	NY1 HE 109	8.	NY1 HE 123	9.	NY1 HE 189
10.	NY1 HE 213	11.	NY1 HE 285	12.	NY1 HE 303
13.	NY1 HE 313	14.	TRI QC 45		