

Name _____

Date _____

Year Group _____

Verify the Identity

1. $\sin x + \cos x \cot x = \csc x$

Left Hand Side Verification

$$\sin x + \cos x \cot x$$

Steps => $= \sin \zeta + \cos \zeta * \underline{\hspace{2cm}}$

Steps => $= \sin \zeta + \underline{\hspace{2cm}}$

Steps => $= \underline{\hspace{2cm}} * \sin \zeta + \underline{\hspace{2cm}}$

Steps => $= \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$

Steps => $= \underline{\hspace{2cm}}$

Steps => $= \underline{\hspace{2cm}}$

Steps => $= \underline{\hspace{2cm}}$

Drag the blocks to finish the steps

$$\frac{\cos \zeta}{\sin \zeta} \quad \frac{\sin \zeta}{\sin \zeta} \quad \sin \zeta$$

$$\frac{\cos^2 \zeta}{\sin \zeta} \quad \frac{\sin^2 \zeta}{\sin \zeta} \quad \frac{\sin \zeta}{\cos \zeta}$$

$$\frac{\cos \zeta}{\cos \zeta} \quad \frac{\cos^2 \zeta}{\sin \zeta} \quad \frac{1}{\sin \zeta}$$

$$\csc \zeta \quad \frac{\cos^2 \zeta}{\cos \zeta} \quad \frac{\cos^2 \zeta}{\sin \zeta}$$

$$\frac{\sin^2 \zeta}{\cos \zeta} \quad \sin^2 \zeta + \cos^2 \zeta$$

Put the extra 4 blocks here

$$\underline{\hspace{2cm}} \quad \underline{\hspace{2cm}}$$

$$\underline{\hspace{2cm}} \quad \underline{\hspace{2cm}}$$