Math 222-Quiz-2 (53402)

**Choose the correct answer**

1. $\frac{cosx×cscx}{tanx}$ is equal to

 (a) $cot^{2}x$ (b) $tan^{2}x$ (c) $cos^{2}x$ (d) $csc^{2}x$

1. $sin70^{°}cos25^{°}-cos70^{°}sin25^{°}$ is equal to

 (a) $ sin45^{°}$ (b) $sin95^{°}$ (c) $-sin45^{°}$ (d) $cos45^{°}$

1. $\left(secx-tanx\right)\left(secx+tanx\right)$ is equal to

 (a)$ secx$ (b) $-1$ (c) $1$ (d) $tanx$

1. The value of $\frac{dy}{dz}$ where y is given by: $\frac{3cosz}{sin2z} $at $z=\frac{π}{4}$ is equal to

 (a) $\frac{3}{\sqrt{2}}$ (b) $-\frac{3}{\sqrt{2}}$ (c) $-\frac{\sqrt{2}}{3}$ (d) $\frac{\sqrt{2}}{3}$

1. Given $a=10$, $b=15$ and $ c=12$ in $∆ABC$ , then $B$ is equal to

(a)$ 85^{°}30^{'}$ (b) $52^{°}50^{'}$ (c) $39^{°}50^{'}$ (d) $52^{°}30^{'}$

1. $cot\left(\frac{π-2}{2}\right)$ is equal to

 (a)$ tan1$ (b) $-tan1$ (c) $cot1$ (d) $–cot1$

1. Given $P=110^{°}$, $PQ=3.0$ in and $ R=45^{°}$ in $∆ABC$ , then side $RQ$ approximately is equal to

 (a)$ 4.8 $ (b) $3.1$ (c) $4.0$ (d) $1.8$

1. Given that $sinθ=-\frac{12}{13} $ , $270^{°}<θ<360^{°}$, then $tan2θ$ is equal to

(a) $ \frac{119}{120}$ (b) $-\frac{120}{119}$ (c) $\frac{120}{119}$ (d) $-\frac{119}{120}$

1. The value of $ \frac{dy}{dx}$ where y is given by: $ylnx-2y^{2}=0$ at $x=1$ ($ln1=0) $is equal to

(a) $-\frac{1}{4}$ (b) $4$ (c) $\frac{1}{4}$ (d) $-4$

1. The second derivative $ \frac{d^{2}y}{dx^{2}}$ where y is given by: $\sqrt{1-sin^{2}x} $ is equal to

(a) $-cosx$ (b) $cosx$ (c) $sinx$ (d) $- sinx$